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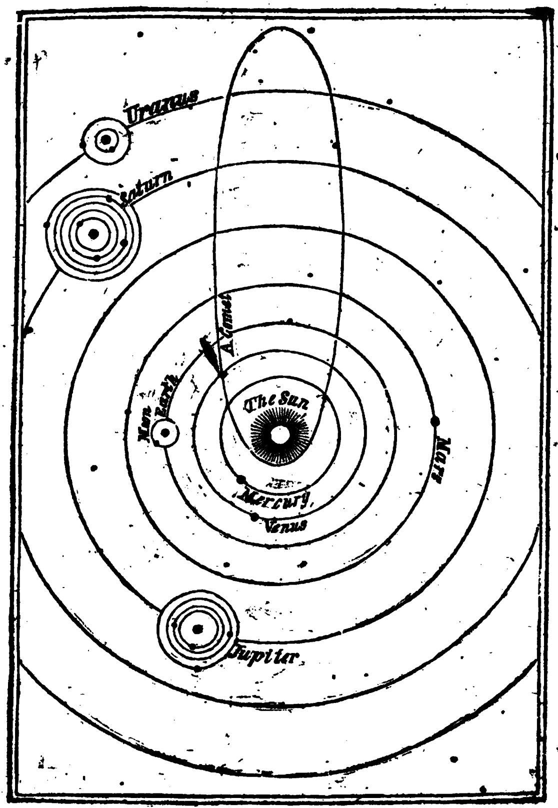

SOLAR SYSTEM.

A MANUAL

OF

USEFUL STUDIES;

FOR THE

INSTRUCTION OF YOUNG PERSONS OF BOTH SEXES,

IN

FAMILIES AND SCHOOLS.

BY NOAH WEBSTER, LL. D.

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PREFACE.

In early life, during my course of education, much time was spent in learning what I have never had occasion to apply to any purpose whatever, and a great part of which has long since been forgotten ; but I neglected to learn many things which I have had occasion to use all my life. A great deal of time and labor was employed, and for the most part wasted, in *general reading*, or reading and study without a *specific* object. It was not till I commenced the study of law, that I discovered the mistake. I then changed my course of study, and instead of reading to learn general facts and principles, many of which could not be retained in the memory, I directed my attention to particular questions or points, each separately, and thus was able to become fully possessed of each subject, and to recollect both facts and principles.

A mistake like this is probably not uncommon. It often occurs in schools in which children are directed to learn definitions, or general principles, without any application of them to particular objects or cases. These, of course, make little impression on the mind, and many of them are soon forgotten.

In my course of reading, like other young men, I confided in the statements and opinions of authors, without *investigating* the subjects treated, and in many cases, embraced opinions and theories which experience, observation, and later researches, have scattered to the winds.

After arriving at the period of middle life, I betook myself to a close investigation of *one* branch of literature, and soon discovered that my confidence in authors had often been misplaced. This obliged me to retrace my steps for the purpose of correcting the errors which had been imbibed. I then found I had begun to publish my opinions prematurely; a circumstance which is now regretted. Possibly this example may operate as a caution to young men, ambitious of authorship, not to hazard the publication of their opinions, till time, long study, observation, and experience, have matured their judgment.

In the department of literature which has occupied the latter part of my life, I find that books, written by superficial authors, have fastened upon the minds of our citizens, errors which it is difficult to eradicate. These errors are continually republished by compilers of books for schools, who receive them, as I once did, upon the authority of former writers, without investigation.

This little volume of miscellaneous contents has, for its object, *practical utility*. The former part of it is adapted to enlarge the views of young persons of both sexes, respecting the character and works of the Creator, and lead their minds to cultivate habits of reverence for his laws, of gratitude for his beneficence, of obedience to his commands, and of confidence in his promises.

The remaining articles are designed to teach what all persons of a liberal education ought to know; and most of which other persons will find it useful to learn. Females may be left without a father, a husband, or other protector, and should have some knowledge of their legal rights, which may assist them in protecting themselves. Every minor, and every apprentice, should know his rights and his duties; and every citizen should know what the laws enjoin upon him, in his relation to his fellow citizens.

The chapters on Logic and Rhetoric, are brief, but they probably contain all the rules and principles required for the instruction of youth in general. More extensive details may be necessary for professional men. It is believed to be a great mistake to press and overload the minds of youth, with too many studies, or with minute particulars, in sciences which have a very remote relation to their social duties, with little or no bearing on their future employments, and which are soon forgotten.

Practical truths in religion, in morals, and in all civil and social concerns, ought to be among the first and most prominent objects of instruction. Without a competent knowledge of legal and social rights and duties, persons are often liable to suffer in property or reputation, by neglect or mistakes. Without religious and moral principles deeply impressed on the mind, and controlling the whole conduct, science and literature will not make men what the laws of God require them to be; and without both kinds of knowledge, citizens can not enjoy the blessings which they seek, and which a strict conformity to rules of duty will enable them to obtain.

N. W.

NEW HAVEN, *April*, 1839.

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MANUAL OF USEFUL STUDIES.

CHAPTER I.

THE SOLAR SYSTEM.

The solar system consists of the sun, and of the planet which revolve around it at different distances. The wor *planet* signifies a wandering star, and this name is given t the moving orbs of the solar system, because of their revolution about the sun, and to distinguish them from the fixe stars.

The sun, the most beautiful of the heavenly bodies whic are ever presented to our view, is situated in or near the center of the system, and diffuses light and heat to all the planet

The sun is an immense body; its diameter being eigl hundred and ninety thousand miles. Its figure is spherica and a circle is the most beautiful figure in creation.

The planets are vast orbs, which move round the sun in path which is nearly circular, but somewhat elliptical, calle an *orbit*.

The principal planets are Mercury, Venus, the Earth, Mar Jupiter, Saturn, and Uranus.

Mercury, the planet nearest to the sun, is named from heathen deity. Its distance from the sun is nearly thirty seven millions of miles; its diameter is three thousand an two hundred miles; and its revolution around the sun is completed in about eighty-eight of our days.

Venus, so called from the heathen goddess of that name and probably on account of its brightness, is distant from th sun sixty-eight millions of miles. Its diameter is about seve thousand and seven hundred miles, and it revolves around sun in about seven months and a half. When this splendid planet rises before the sun, it is called the morning star; when it sets after the sun, it is called the evening star.

The earth is nearly eight thousand miles in diameter, and its circumference more than twenty-four thousand miles. Its distance from the sun is ninety-five millions of miles, or something more, and its revolution round the sun, which makes the year, is completed in three hundred and sixty-five days, and a few minutes less than six hours.

Mars is smaller than the earth, but more distant from the sun. It is named from Mars, the heathen god of war, probably on account of its color, or fiery appearance. The diameter of Mars is four thousand and two hundred miles; its distance from the sun, one hundred forty-four millions of miles, and its revolution, one year and three hundred and twenty-one days.

Jupiter, the largest of the planets, and so called from the heathen deity of that name, has a diameter of ninety-four thousand miles. Its distance from the sun is calculated to be nearly four hundred and ninety-five millions of miles, and its revolution is completed in a little less than twelve years.

Saturn, so named from the heathen Saturn, has a diameter of seventy-nine thousand miles. Its distance from the sun is nearly nine hundred millions of miles, and its revolution round the sun requires twenty-nine years and a hundred and sixty-seven days.

Uranus, called also Herschel, is nearly thirty-five thousand miles in diameter: its distance from the sun is one thousand eight hundred and twenty millions of miles; and its revolution round the sun is performed in about eighty-three years and a half.

There are four smaller planets belonging to the system, called Ceres, Pallas, Juno, and Vesta, the names of heathen deities. These are between Mars and Jupiter, and their orbits are somewhat less regular than those of the other planets. These small planets are called *Asteroids*. The planets are all nearly globular, and all revolve on their axes. Their orbits are all nearly in the same plane.

Some of the larger planets have *Satellites*, or attending orbs, which revolve about them. Of these, Jupiter has four, Saturn *seven*, *Uranus* six, and this globe one; which is called the *moon*. *Saturn is* also surrounded by two luminous rings.

The moon revolves about the earth in about twenty-nine days. Its diameter is two thousand one hundred and eighty miles, and its mean distance from the earth about two hundred and forty-four thousand miles. Its revolution in twenty-nine days is called a *lunation*, or lunar month.

When the moon in its orbit passes the sun, it is said to *change*, and when it is near its conjunction with the sun, we can see only a part of its illuminated surface, so that it appears like a crescent of light. When the moon is seen on the side of the earth opposite to the sun, we see its whole face illuminated, and it is then called the *full moon*.

The light of the moon is a reflection of the light which it receives from the sun. This is a pale light without heat, but it serves to make our nights very pleasant.

When the moon comes directly between the sun and the earth, it intercepts the light, and hides the body of the sun: and this interception of light is called an *eclipse*. When the earth is directly between the sun and the moon, the shadow of the earth is cast upon the moon, and this eclipses the moon. The circular form of this shadow upon the moon, is a decisive proof that the earth is globular.

As the orbits of the planets are not exactly circular, but somewhat elliptical, these orbs approach nearer to the sun at some times than at others. The point of nearest approach of the orbit to the sun, is called the *perihelion;* the point most distant, the *aphelion*. The point of nearest approach of the moon to the earth, is called its *perigee;* the point most distant, its *apogee*.

Comets are luminous bodies which come from remote regions of space, pass round the sun, and then depart to unknown distances. They are attended by a luminous atmosphere, or light, or with a train of pale light. The writer saw one in his youth, whose train extended from the horizon nearly to the meridian. This train proceeded from the body of the comet, and became broader as it receded from it, in a direction opposite to the sun.

With the help of a telescope, stars may be seen through the body of some comets, which proves that such are not solid bodies. The path or trajectory of comets is extremely elliptical, and it has been found to be very difficult to ascertain their revolutions.

The revolution of the earth on its axis once in twenty-four hours, constitutes our day and night. In each revolution, the whole surface of the earth is presented to the sun. The shade of the earth constitutes *night.*

The imaginary line on which a planet revolves, is called its axis, which of course is a line passing through its center. The points in the heavens directly vertical, or over the ends of the axis of the earth, are called the *poles*, and the stars in those points, are called *pole-stars*, or the *poles.* The diurnal revolution of the earth is so uniform and exact, that it never varies a second of time in twenty-four hours.

The axis of the earth is inclined to the plane of the ecliptic, or apparent path of the sun, making an angle of twenty-three degrees and a half. By this means, one part of the earth receives the rays of the sun more directly in one part of the year than in the other. The more direct rays produce most heat, and make the summer; the more oblique rays produce less heat, and make the winter. The earth is somewhat nearer to the sun in the winter than in the summer.

A great circle is divided into three hundred and sixty degrees, a quarter of which, or quadrant, is ninety degrees. Every degree is divided into sixty minutes, and each minute into sixty seconds.

The broad circle in the heavens, containing the twelve signs, or constellations, is called the *zodiac,* from a Greek word signifying an animal; as the constellations are mostly represented by the figures of animals. The zodiac is twelve degrees in breadth; and within this circle are the orbits of the planets. Each sign contains thirty degrees.

The *ecliptic* is a line passing through the center of the zodiac, making the apparent path of the sun. This path is apparent only, for it is made by the earth. This line crosses the equator, and extends twenty-three degrees and a half from it, north and south.

The *equator* is a great circle or line, encompassing the globe at an equal distance from each pole. The equinoxial line is the circle which the sun describes at the equinoxes, or when the days and nights are equal, in March and September.

The *horizon* is the line that bounds the sight in every quarter, north and south, east and west.

A *hemisphere* is one half of a sphere, when divided by a plane passing through its center. The equator divides the sphere into the northern and southern hemispheres: the horizon divides the sphere into the upper and lower hemispheres.

The *meridian* is a great circle which is vertical to a person on any part of the globe, and which passes through the poles. When the sun is in this line, it is noon or midnight.

Latitude is the distance of a place from the equator, north or south; *longitude* is the distance of any place from any given meridian, or the distance from one place to another, east or west.

The *tropics* are the lines which mark the limits of the sun's departure from the equator, north and south. These limits are at twenty-three degrees and a half from the equator.

The *zones* are broad belts surrounding the earth. They are five; viz. one *torrid* zone, between the tropics; two *temperate* zones, between the tropics and the polar circles; and two *frigid* zones, between the polar circles and the poles.

The *zenith* is the vertical point in the meridian, to a person in any part of the globe; the opposite point is called the *nadir*. When a star is in the zenith, it is said to be *vertical*.

The planets are retained in their orbits by the attraction of the sun. *Attraction*, or a tendency of one body toward another, is a property common to almost all species of matter. This tendency of bodies to each other, or to some center, is denominated *gravitation*; and the effect of it is *gravity* or *weight*.

This attraction would draw the planets to the sun, if it were not counteracted by another force. This force is produced by the motion of the planets in their orbits, which tends to impel them *from* the sun. The force which attracts the planets toward the sun, is called *centripetal*; that which counteracts this tendency, is called *centrifugal*.

The force of gravity is in a direct proportion to the quantity of matter in the attracting body.

The great law of gravitation is, that the force decreases inversely as the square of the distance of the planet from its center. For example, if the distance of the planet from the sun is four millions of miles, and the attractive force is a *sixteenth*, then let the distance be five millions, and the attractive force will be only a *twenty-fifth*; for the square of four is *sixteen*, and the square of five is *twenty-five*.

By this gravity, bodies tend to the earth, and this is the force that retains all bodies on the earth. By this force, rain falls from the clouds and rivers run to the ocean. By this force, the ocean is retained in its bed. By this force, we are kept on our feet; and by the same force, an antipode stands with his feet directly opposed to ours.

Were the force of gravity altered, the weight of bodies would be altered; and were it removed, bodies would fly off in every direction. This is the great principle which binds the system together, and keeps every body in its place.

It is to be observed that the laws of nature are permanent and unalterable. This circumstance is of very great importance to man. Knowing that a body elevated in the air will fall, if unsupported, we may always be prepared to avoid injury by the fall. We know that if we ascend above the earth, we must provide a sufficient support for ourselves, for we know that gravitation will not be suspended to save us.

The laws of motion are uniform. It is one law of motion, that a body moved in any direction will continue to move, without any alteration in its velocity or direction, until it is resisted by another force. Hence we suppose that the motion of the earth in its revolution round the sun, and on its axis, continues as it ever has done; there being no resisting medium to check or retard it. And so far as evidence exists, the length of the day, which is one revolution of the earth on its axis, has never varied a second from the beginning of the world.

But as there is, for most bodies, a necessity for rest, as well as motion, we find that there is on earth, provision made for this purpose, in what is called *friction*. The rubbing of one body against another retards motion. Without friction we could neither stand nor walk with steadiness, as we know by experience on ice. But the ground or surface of the earth is admirably fitted to render our footsteps firm. Were the earth smooth like ice, we could not ascend a hill, nor descend without danger.

By friction we are enabled to hold things in our hands; we pull, and we climb. The seamen, by friction, ascends a rope, or the shrouds, and maintains his position aloft. By friction, edifices are kept in their places, as are our tables, our chairs, and our dishes. By friction, wheels run on the earth without sliding, and care is taken to facilitate their revolution on their axle-trees, by the use of oleaginous substances, which lessen the friction. In like manner, similar substances are used to facilitate motion, in all parts of machinery in which movement is required. Thus we see that the laws of matter are all adapted to the wants, comfort, and safety of mankind.

The creation of the immense bodies which compose the system, and the preservation of them in their order, furnish indubitable evidence of the unlimited power of the Creator; while the perfect order and harmony of their revolutions, and the adaptation of their position and movements to the most beneficial purposes, are equally proofs of his design, his wisdom, and his benevolence. Order and regularity cannot proceed from chance.

The revolution of the earth around the sun establishes the year, the most important division of time. The inclination of its axis to the plane of the ecliptic, gives us summer and winter; the revolution of the earth on its axis, gives us day and night; the one for active employments, the other for rest and repose. The simplicity of the arrangements for these purposes, is a wonderful phenomenon.

The stability of the laws of the system furnishes the means of navigating the ocean with advantage. So uniform is the motion of the earth in its orbit, that its relative position in the system may be calculated with unerring certainty for a year, or for a thousand years to come. The same is true of the moon. Hence the navigator, by his astronomical tables and lunar observations, may, in the midst of the ocean, determine the latitude and longitude of his ship, and by this means direct his course to the intended port.

The establishment of a regular return of seasons is connected with the constitution of vegetables. The growth of plants requires a certain degree of heat, the withdrawment of which puts a stop to that growth. Hence we may observe, that vegetation is adapted to the change of the seasons.

In the spring, as soon as there is a suitable degree of heat, plants begin to grow, and blossoms open for the production of seeds. When the fruit is matured, the plants decay; annuals cast their leaves and perish; but perennial plants, though their leaves fall and perish, retain the principles of life, and during the winter their wood undergoes the process of becoming hard and firm.

Yet the germination of plants seems to be not wholly dependent on heat, but partly on their constitution: for in the spring they seem to struggle for growth, even when the heat is not sufficient to promote it. It is said that Alpine plants will open their flowers before the snow about their roots is dissolved.

That there is something in the nature of plants that operates to produce germination and growth, at a particular season, in despite of the want of heat, is apparent from the fact, that plants of the northern climates transplanted to the south of the equator, will for some years grow at the same time they are accustomed to grow in the north, although it is winter in the south, where they are placed.

One thing, however, is certain, that plants are fitted for the climate in which they grow, and the summer, in ordinary years, is sufficiently long for them to come to maturity. This adaptation of the constitution of plants to the seasons, or of the seasons to the constitution of the plants, is evidently a part of that wise, provident, and benevolent system, which characterizes all the works of the Creator.

Nor is the division of the diurnal revolution of the earth into day and night, less obviously adapted to the wants and accommodation of man and beast, than the division of the year to the nature and perfection of plants. The bodies of animals require rest after violent or long-continued exertion. In the labors of men particular muscles are strained, till weariness succeeds to strength and activity, and sleep becomes absolutely necessary to restore the tone of the whole system

In aid of the physical remedies for exhausted nature, comes the rest of every seventh day, by special command of Jehovah. Independent of all its moral bearings on the happiness of society, the institution of the Sabbath is of the utmost importance to the health, the comfort, and the life of man. It also gives to the laboring beast a period of time to recruit his strength, and thus to be more useful to his owner. Those who neglect the observance of the Sabbath, neglect their own best interests.

It is observed by writers, that the force of gravity on the earth is adapted to the growth of plants. The sap of a tree or other plant is imbibed by the fine fibrils of the roots, and pressed upward by the weight of the atmosphere. Many experiments have been made to prove this fact. One experiment on the vine showed that the sap of the vine was, by this force, pushed upward in a glass tube twenty-one feet above the amputated stump. If the force of gravity were much increased or diminished, the effect would be to derange the process of vegetable growth. This adaptation of gravity to the laws of vegetation, is another proof of the wise designs of the Creator.

It is stated also, by botanists, that the flowers of plants whose pistil is longer than the stamens, and which in an upright position, would not receive their dust, will droop or bend to receive the fructifying dust, and afterward recover an upright position. The writer has observed that the pistils of the maiz, or silk, as they are called, are naturally divided, or open at the ends, and bent upward, as the stamens are always above them. And if the ends of the pistils are cut off during the period of fecundation, the ends will soon cleave and open, and bend upward, as in their original state. In this case, the operation absolutely resembles that of instinct in animals.

Another remarkable law of vegetables is, the uniform winding of a vine around a pole or supporter, always in the same direction. So perfect is this law in its operation, that no human power can compel a vine to take a direction different from that which is natural. Who can assign a physical cause for this law, or any cause but that of a divine author?

It may be remarked, that the air in a whirlwind, uniformly takes one and the same spiral direction. And it deserves to be considered whether the flue of a chimney, winding in the same direction, would not favor the ascent of smoke.

In the vegetable kingdom we see a remarkable adaptation of the different species to different climates. Some species grow only within the tropics; others thrive best in the higher latitudes; others, and those the most necessary for the sustenance of human life, grow in nearly all the habitable climates.

Wheat, the grain which makes the finest bread, thrives and comes to perfection, from the equator to fifty-five degrees north and south of the equator. Maiz thrives best in warm climates; but by a wonderful principle, the different varieties are adapted to the degrees of heat and length of the summer, from the equator to the forty-fifth degree of latitude. Within the tropics it rises to fourteen or fifteen feet, and requires a long summer for growth. In the middle latitudes, its highth is limited to six or seven feet, and in Canada, it seldom exceeds four or five feet.

Rice, the food of half the human race, grows only in the warmer climates; but its qualities are peculiarly adapted to health in such climates, being of easy digestion, and not tending to generate acidity in the stomach. One species of potato grows to most perfection in northern latitudes; another in the warmer climates. Oats, and some roots, thrive best in high latitudes, and are scarcely worth cultivating in the tropics.

Within the tropics, the spontaneous productions of the earth furnish a large portion of the food of man. Among these are the yam, banana, cocoa-nut tree, and bread-fruit tree. The latter tree is the produce of the numerous isles in the Pacific, and affords food to an immense number of inhabitants.

The cocoa-nut tree flourishes in the warm climates, and is cultivated to a great extent. It is stated that on the coast of Ceylon, within the distance of about one hundred and eighty-four miles, not less than ten millions of this tree are cultivated. It is fruitful from the eighth year of its age to the sixty-fourth. It grows on sandy land, which will produce scarcely any other plant. Not only is its fruit valuable, but every part of the tree. The wood of the stem is used in the construction of houses; and the leaves furnish covering for roofs. The cabins of the poor are constructed entirely with materials from this tree; and other persons often dwell in houses sheltered wholly by its leaves. The fibers of the shell of the nut may be wrought into the strongest cordage.

Vegetables constitute not only the more important parts of food, but many of them supply luxuries. Of these the sugar-cane is the most interesting, as furnishing an article that contributes greatly to the uses and pleasures of the table. Not only the granulated sugar, but the melasses, the sirup or drainings of the sugar, is a useful ingredient in many articles of cookery. Nor must we forget the hard maple of the United States, whose sap, collected and evaporated, gives us sugar of an excellent quality.

To render our food more palatable, and increase the pleasure of eating, we are furnished with various spices from the isles of the East Indies. But it must be remarked, among the proofs of design in the Creator, that those vegetables which are wanted in the greatest abundance, are furnished in the greatest abundance. Small quantities only of spices, and articles of luxury, are wanted, and their production is limited to a small portion of the globe.

But vegetables are not valuable for food only: their uses in medicine, and in dyeing, and in tanning lether, are numerous and important. Who can estimate the value of Peruvian bark and its preparations, in curing the intermitting fever? Who that has ever suffered the excruciating pains of disease, but must feel grateful to his Maker, for the gift of opium to the human race? Even alcohol, in diseases and in surgery, is often a medicine of prime importance.

The fermented juices of the grape and the apple, supply us with cordials of no mean value; and after suffering the vinous fermentation, they give us vinegar, an article of great use in the preservation of fruits, in seasoning food, in cleansing infected apartments, and, with the acid juices of the orange and the lemon, contributing to heal or prevent the scurvy of seamen in long voyages.

In the art of dyeing, vegetables are of inestimable value. In Great Britain alone, the value of indigo annually consumed, is little less than four hundred thousand dollars. And let us attend to the vermilion, the logwood, the fustic, the gall-nut, and other articles used in coloring, and see what employment the art of dyeing gives to the laboring poor, and what beauty and ornament to our furniture and our garments.

The lether which forms our shoes and the harness of our carriages, derives its firm texture from the bark of trees; the ink that forms the letters of my pen, is derived from the oak, and the ink which will form impressions of these letters in printing, derives its blackness from the soot of burning pines

From the forest we receive the timber for constructing houses and ships, and in most countries, the fuel that warms the dwellings, and prepares the food of the inhabitants. From the forest, also, we are supplied with timber to fence our farms; while in some countries, the living thorn in hedges incloses fields and defends the crops.

In the vegetable kingdom, also, we have one of the constituent ingredients of glass; and from the ashes of plants we derive those valuable alkaline substances, potash and pearlash, which are so useful in bleaching, and in the formation of soap for cleanliness.

One of the most important of all the uses of vegetable substances, is that of being the material of paper. When cloth, made of vegetable substances, has been worn till it is useless for garments, the very rags that remain are the material of paper. This is the medium of recording the events of history; of communicating intelligence from man to man, and from one country to another, over the habitable globe; and of preserving and communicating a knowledge of arts and science to all the world, and to all future generations.

In closing these remarks on the vegetable kingdom, let it be observed, that all animals subsist on vegetables, either immediately, by feeding on them, or mediately, by feeding on other animals which subsist on them. The rapacious or carnivorous animals devour the flesh of other animals, which feed on herbage and fruits, and the large marine animals devour smaller marine animals, which derive their nourishment from marine plants. In this manner the large animals are sustained *mediately*, by plants, which their mouths are too large to collect, but which the smaller animals gather and consume.

CHAPTER II.

GEOLOGY.

The exterior part of this globe, consisting of solid substances, earth, minerals, and metals, is called the *crust*. The most general opinion of geologists is, that the whole mass of the globe was once in a fluid state, occasioned by intense heat. Certain it is, that there are vast masses of fire, or ignited substances, still within the earth; for immense quantities are frequently thrown out in volcanic eruptions, on every side of the globe.

In the cooling of the surface of the earth, which now forms its crust, the materials were converted into a solid form, chiefly in two ways: first, by chimical affinities: and secondly, by deposits of particles of matter from moving water. These deposits now form strata, or layers of rocks, containing mixtures of animal and vegetable remains. The first mode of formation, produced what are called *unstratified crystalline* rocks; the second, produced the *stratified* rocks.

The stratified rocks are arranged under the following divisions: *primary*, *transition*, *secondary*, and *tertiary* formation.

The primary, or lowest formation, consists chiefly of granite, gneis, and mica slate. In this series of rocks are found no remains of animals or vegetables. Hence it is inferred, that they were formed before any animals or vegetables existed.

The *transition* formations, or series of rocks, present alternations of slate and shale, with slate, sandstone, limestone, and conglomerate rocks, which are composed of pebbles, or coarse sandstone. In this formation are found the remains of animals and vegetables. Of animals, there are found in this series, the four great divisions; the *vertebrated* animals, which have joints like the spines of the back-bone; *moluscans*, whose bodies are soft, without an internal skeleton, or jointed covering; *articulated* or *jointed* animals, and *radiated* or *radiaries*, which have rays like the star-fish.

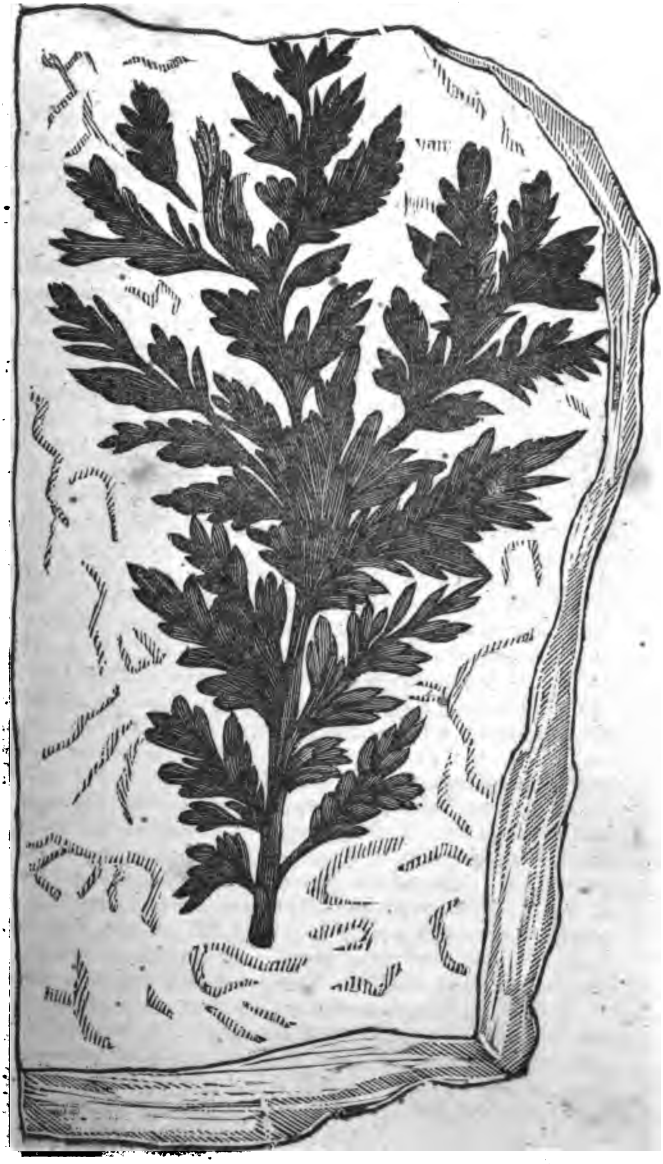
In the upper regions of this series, are found the remains of *land plants, in prodigious* quantities. In this formation chiefly are found beds of mineral coal, which are believed to have been formed from immense quantities of plants buried in sand and mud. Many of them have been changed into sandstone and shale, or slate clay. Hence the strata of this kind are called carboniferous; that is, producing coal, or in other words, the great coal formation.

In this formation are found, also, beds of rich argillaceous iron-ore. These minerals, coal and iron, are among the most useful of all the contents of the subterranean regions. With these we warm our dwellings, heat our furnaces and forges, prepare our food, and form utensils and tools of every kind. Coal is supposed to be the remains of ancient forests, reserved for man, to increase his riches, and multiply the comforts of human life. These are proofs of the wisdom and goodness of our Creator, which ought not to be overlooked.

The *secondary* strata consists of extensive beds of sand and sandstone, mixed occasionally with pebbles, and alternating with deposits of clay, marl, and limestone. These strata furnish the soil of the best inhabited parts of the earth. In these, also, are found innumerable springs of water, and vast beds of salt. And it is one of the most observable instances of divine goodness, that mineral salt is formed in the interior of continents, remote from the ocean. If all men were under the necessity of procuring salt from the sea, the distance would render this article of prime use almost unobtainable by a great portion of mankind.

The secondary strata abound with the remains of animals and vegetables. They contain zoophytes, bodies that seemingly partake of both animal and vegetable natures; such as madrepores, millepores, and corallines, different species of submarine substances, formed by small animals. They contain, also, remains of crustaceous animals, which are such as have soft shells, like the lobster; testaceous animals, having hard shells, like oysters and clams; also remains of fishes.

In this formation are found, also, the remains of marsupial animals, such as have a bag or pouch connected with the belly, and are allied to the opossum. More particularly are these strata remarkable for the prevalence of gigantic forms of saurian reptiles; that is, animals of the lizard kind. Some of these are marine, inhabiting the sea only; others are *amphibious, living* on land or in water; and others are *terrestrial, living only* on land.



A *Fossil Plant.*

The tertiary or third series of strata, consists chiefly of sand and clay, and of alluvial and diluvial deposits. The alluvial deposits have been formed by floods and streams of water; the diluvial are supposed to have been occasioned by the deluge, in the days of Noah. These strata contain the remains of vast numbers of animals and plants, in alternate deposits, made by the sea and by fresh water.

In the fresh water formations chiefly, are found the fossil remains of nearly fifty species of mammals or mammifers, which are quadrupeds which supply their young with food from their breasts. These animals are of various sizes, from the size of a hare to that of a horse. They belong to the order of pachyderms, or pachydermata, animals having a thick skin, like that of the rhinoceros and hippopotamus.

In this formation are found, also, the remains of several species of fowls; as accipiters, or rapacious fowls; gallinaceous fowls, the class to which belong the domestic hen; fowls of the grallic or stilted order, waders with long, naked legs; and palmipeds, fowls with webbed toes for swimming. There have been found, also, the fossil remains of the eggs of aquatic fowls. To these remains may be added the leaves and prostrate stems of trees, and great deposits of calcarious substance, the materials of limestone, or carbonate of lime. It is said that the masses of limestone constitute an eighth part of the superficial crust of the globe. This is a most important provision, made by the Creator for the accommodation of the human race.

These facts demonstrate that the crust of the globe has, since the creation, undergone great changes, which can not be ascribed to the deluge, in the age of Noah. It appears that multitudes of animals have existed in former periods, quite different from any which are now known to exist. It appears, also, that the different strata of rocks have been formed in successive periods: the lowest, or granite formation, containing no animal and vegetable, must have been formed before animals or vegetables were created. The next series contains some animal remains; the others abound with them.

This account of the different formations in the crust of the earth, serves to illustrate, in a most surprising degree, the brief record of creation, in the first chapter of Genesis; and thus to confirm the authenticity of that record, as well as the inspiration of its author.

After the declaration, that "In the beginning God created the heaven and the earth," the scripture informs us that "the earth was without form and void, and that darkness was upon the face of the deep. The spirit of God then moved upon the face of the waters."

From this narration, we learn that the earth was at first a chaos, or confused mass of matter, covered with water. Observations made in every part of the earth, confirm these facts; for marine shells are found on the earth, and upon mountains, in immense quantities, proving that the very mountains were once beneath the ocean.

The next step in the process of creation was, the creation of light. "God said, Let there be light, and there was light." Hence it appears that light was created before the sun and other celestial bodies.

It is the opinion of those who have examined the heavens with telescopes of the largest magnifying powers, that the vast tracts of nebulous light which are visible, are *diffused light*, from which the sun and stars were formed by condensation. There are many appearances which give probability to this theory. If this was the case, then it is easy to see that light was created before it was concentrated in the heavenly luminaries.

We are then informed by the sacred historian, that the light was separated from the darkness, and that God called the light, *day*, and the darkness, *night*. From this it may be inferred, that the *day* here mentioned was not the limited period now called *day*, but it was *light* in general.

The next step in the process of creation was, the establishment of the firmament, or expanse, which separated the waters under the firmament from those above it.

We now come to the appearance of dry land, which was effected by the collection of the waters in one place. The dry land was called *earth*, and the collected waters, *seas*.

Thus far we observe, the process of creation was preparatory to the creation of plants; for it is to be noticed, that *light* is necessary to the growth and perfection of vegetables, as well as dry earth, on which they grow.

These preparations being made, God created plants, grass, and the herb yielding seed, and the fruit-tree yielding fruit after *its kind*. Let it be observed, that every plant yielded its proper *seed, that it might* be propagated forever, without the necessity of a new creation. Let it be further observed, that vegetables were created *first*, and the propriety and necessity of this order in creation are now apparent, for vegetables are, either primarily, or secondarily, the food of all animals. This was the work of the third day, or the third step in the great process of creation.

After these acts of creation, we are informed, that God made lights in the heavens, for signs and for seasons, for days and years. For these purposes, he made two great lights, the greater light, the sun, to rule the day, and the lesser light, the moon, to rule the night. This is the fourth day.

The next work was the creation of animals. "Let the waters bring forth abundantly the moving creature that hath life, and fowls that may fly above the earth, in the open firmament of heaven." Among the marine animals are specified great whales, then every living creature that moveth, and every winged fowl.

Let it be noticed, that the sea and the air were first replenished with animals, and the surface of the earth was covered with plants, before man was created. The plants furnished food for the animals, the seed and fruits for the fowls, and the vast masses of coal within the earth were formed from deposits of trees and other plants.

At the same time, marine plants supplied food for the smaller aquatic animals, and these animals were the food of the larger marine animals. Thus the process of creation was regular, and preparatory to the last act of creation, in the formation of *man.*

In this view of the subject, we observe the wisdom of the Creator; every step in the process manifesting intelligence, wisdom, and design. We now see that the creation of numberless plants and animals, was a preparation for the subsistence and accommodation of the higher order of beings, the intellectual or rational part of creation.

To these periods of time preceding the creation of man, we are to refer the existence of the multitude of aquatic animals, now extinct, but whose fossil remains are found in abundance, in the various strata which form the crust of the globe.

Last of all, God created man in *his own image and likeness*, and gave him dominion over the fish of the sea, and over the fowls of the air, and over the cattle, and over the earth, and over *every living animal* that moves upon the earth. To man he gave an erect and beautiful form, and the faculty of reason; thus exalting him to the head of all created beings on the earth.

Perhaps there are no evidences in creation, which establish the truth of the scriptures on firmer ground, than the wonderful discoveries in geology, which prove, to a demonstration, by the order of the mineral formations, that the process of creation must have been such as the account of it in Genesis represents it to have been. Before such evidence, skepticism must quail, and be overwhelmed with confusion.

In this structure of the crust of the globe, we recognize the wisdom and benevolence of the Creator, in providing for the wants of mankind. The earth is the great repository of metals and minerals, without which men could never have enjoyed the benefits of civilization. The want of iron alone, would have forever kept mankind in a semi-barbarous state.

We observe, also, that those minerals which are most needed to supply a numerous population, have been supplied in the greatest abundance. Gold and silver are needed in quantities comparatively small; while iron and salt, which are indispensable, have been formed in great abundance; and coal, intended by the Creator to furnish man with fuel, when all forests have been consumed, is supplied in inexhaustible quantities. If Great Britain had not ample quantities of this mineral, it would not now be habitable by man.

And it ought not to escape notice, that the vast beds of mineral fuel are deposited beneath the surface of the earth, where they occupy no space which is wanted for the use of men; on the other hand, the ground above them is used for the production of grain, grass, and fruits, for the sustenance of man and beast. Here they lie, subject to no waste or loss, till the wants of men demand the use of them.

Salt, in like manner, is formed in immense beds below the surface of the earth, or it exists in solution, in reservoirs of water, which are inexhaustible. The water of the ocean, also, is an inexhaustible source of supplies of salt; and both these sources of this substance, are accessible to man, whenever his wants demand them. But the saline quality of sea-water answers other valuable purposes. It is supposed this quality of the water serves to preserve its purity; and certainly it is of essential use in navigation, for being heavier than fresh water, it is more buoyant, and sustains a heavier weight in ships, than fresh water.

In all these and many other circumstances, we observe the wisdom and benevolence of the Creator, in forming and adjusting the crust of the globe to the support and convenience of mankind. The immense abundance of limestone, in most parts of the world, is equally a proof of the same benevolence; as it supplies for buildings a material of indispensable use.

Nor must we overlook the provision for supplies of water, an article next to air, the most necessary to the subsistence of the human race. Water, from rain and snow, is lodged in subterranean reservoirs, from which it issues in springs, which form streams, descending from mountains and hills, and uniting to form rivers which supply the wants of man, as they run, and at last pour the surplus into the ocean. Within the earth, the water is kept in purity, which, on the surface of the earth, would stagnate or become foul; or if there were not immense reservoirs within the earth, it would, at times, be all evaporated, or would all be conveyed to the ocean, so that men would perish for the want of this indispensable article.

Hence we see the use and value of mountains and hills. Mountains usually consist of vast masses of rocks, rising to a great highth, above the common surface of the earth. If such elevations were composed of earth, they would be continually washed down upon the plains below, and in time be reduced to a level with the general surface of the surrounding plains. But their contents, consisting of rocks, insure their durability. Yet these rocks have not an unbroken surface, which would cast all the water falling on them in rain, down into the valleys, without admitting it into the depths below. On the other hand, they are generally broken, so that the water descends into subterranean caverns, there to form reservoirs, the sources of springs.

Mountains are necessary to give rivers a currency to the ocean; and on continents, where rivers must be of great length, the mountains, or the land in general, must be raised far above the level of the ocean, in order to form a slope from the furthest sources of the rivers to the sea. This is the actual structure of the earth, indicating design and wisdom in the Creator. Nor are the masses of rocks composing mountains useless in other respects, for generally a large portion of their acclivities is covered with earth sufficient to support plants and trees, which furnish timber and herbage on land incapable of tillage.

Mountains, also, are the habitations of wild beasts, many of which supply men with furs, the warmest of clothing; they contain, also, vast beds of minerals, many of which are useful to man.

Nor must we overlook the benefits of mountains in attracting clouds which water the earth, and in giving circulation to pure salubrious air. Many mountains are so high as to retain snow and ice, during the summer, some part of which is continually dissolved, furnishing perennial springs and streams to refresh and fertilize the subjacent plains.

Mountainous countries are the regions of health. The pale, emaciated inhabitants of cities visit the hilly country, to breathe a pure and temperate air, and drink the water of crystal fountains, and there they recover their native bloom and vigor.

In many parts of the great continents are lakes or inland seas. Lakes are vast basins of water, received from innumerable springs and small streams. These lakes are, in some cases, the reservoirs of water which supply the large rivers They produce fish, also, which are food for the inhabitants of the adjacent country; and are of great utility in furnishing navigable water for transporting the productions of agriculture to market, and supplies of foreign goods for the population of the interior of continents. Inland seas serve a like purpose; the Mediterranean and the Baltic giving navigable water to the interior country; the former to the extent of two thousand miles.

From springs and rains, and from melting snows and ice, proceed rivers. These distribute water in ten thousand directions over the face of a country; many of them large enough to bear ships and other vessels into the heart of the interior country; others bearing boats of size to convey goods, fuel, lumber, stone, iron, and other commodities, from one place to another; and almost all of them producing fish for food, in inexhaustible numbers. All these are the arrangements of a benevolent Being for the subsistence and accommodation of man.

If we extend our views to the great divisions of the globe, the land of continents and the waters of the ocean, we can not help being struck with the adaptation of these divisions to the wants and convenience of mankind. We observe two great continents extending from the north polar regions to the south, separated by the Atlantic ocean. On the north, these continents run into the region of perpetual frost, which renders navigation around them impracticable. If they extended, in the south, to the region of perpetual frost, there would be no navigable communication from the Atlantic to the great Pacific ocean. But the Creator has otherwise constructed the surface of the globe. He has terminated the continents, at the south, in navigable regions, so that the means of an uninterrupted communication are furnished; between the two great divisions of water.

In the midst of the vast southern ocean are smaller continents, or isles of great extent; and in almost every part of this great expanse of ocean, are innumerable isles, most of which are inhabited, and these accommodate seamen on long voyages, with fresh food for their subsistence and comfort. It is thus the Creator has given to man the means of conveying the productions of each remote country to every other country, at a small expense. What one country does not furnish from its soil is supplied from another; and the fruits, and the productions of the labor of all the world, contribute to the common enjoyment of all its inhabitants.

And of what value are whales, the inhabitants of the mighty deep! Attend to the use of oil in the machinery of our manufactories and of our steamers and cars, and in the production of light. See whole cities in Europe and America, illuminated from a material generated in the huge monsters of the deep, which live and sport on the other side of the globe. The lamp by which I pen these remarks furnishes demonstrative evidence of the design of an Almighty Creator, as well as of his benevolence, in the disposition of oceans and of continents; of seas and lakes and isles, of mountains and rivers, with all their innumerable inhabitants; formed and adjusted to the wants and the accommodation of the human race. To every man of just views, what a delightful theme of sublime contemplation; and to every good man, what a source of confidence in his Maker and of gratitude for his goodness!

In the materials which compose the surface of the land, we observe evidence of design and benevolence in the Creator. Land furnishes the chief productions which are the means of subsistence for man and beast. The soil is different in different places, but almost every where susceptible of tillage. It consists of a mold, or soft earth, loam, or clay, not too hard to be turned over, broken, and pulverized by the plow, and yet so hard as to support the heaviest animals and loaded vehicles. It admits water to penetrate the soil, and retains it long from evaporation, thus holding the nutriment of vegetables. It is not too dense and hard to prevent the roots of trees from spreading freely, and yet is so firm as to sustain them in an upright position.

In the manner of supplying the earth with water for man and beast, and particularly for nourishing plants, we see an admirable example of divine economy. The atmosphere which surrounds the globe is made the vehicle to convey water to every part of it. Water is raised from the earth, from the sea, from rivers and lakes, by evaporation, and sustained by the air in an invisible state. By this means, it is wafted over the earth without intercepting the rays of the sun, so that men are not interrupted in their business, nor vegetation deprived of light, while a vast body of water is collected in the atmosphere, ready for watering the earth. And when this water descends, it is not poured down in a mass, which would break down and destroy the growing plants, but it descends in small drops which do not injure plants, and by this means, the aqueous particles are distributed to every portion of land. The minute particles being separated, then penetrate the soil so as to reach the finest fiber of the roots of plants.

In the vegetable kingdom we see innumerable proofs of divine agency and design. When God first formed plants, he made every plant and every tree to yield its own seed. By this arrangement, every species may be propagated, to any period of time, without a change of its former qualities. Every species is kept distinct from every other species. And most seeds are formed with a hard coat, covering the kernel and protecting the germ of a future plant. This provision is adapted to secure the germ from decay, and to give it a long duration. It is supposed that many seeds, deposited in the earth below the proper heat for causing germination, and sheltered from the action of the air, will endure for an age, or for ages. Some seeds, for the purpose of being dispersed, are fethered ; that is, furnished with a downy substance, by which they may be borne by the air and wind, and scattered in all directions. But to prevent the too great multiplication of noxious weeds, the small seeds are made the food of birds, which devour the surplus. What but infinite power could give to every plant a definite form and certain qualities, and to the seed of every species a germ of the same nature, and with unerring certainty, producing the same species, thus preventing the intermixture of different species and genera? Such facts demonstrate the existence and perfections of an intelligent Being, who created all things, and who superintends the minutest laws of whatever he has made.

In the growth of vegetables we see equal evidence of Almighty agency. The roots of vegetables penetrate the earth, where there is moisture to nourish the plant; water being the principal instrument or the medium of conveying nutriment to every part. The water is absorbed by the minute fibers, and carried to the stem, in which are the vessels which convey it to every branch and twig and leaf. This water imbibes the qualities of the plant, and is called *sap*. The tree and every plant is covered with a coat, skin, rind, or bark, to protect the vessels and vital parts from injury. At the extremity of the branches and shoots are expanded the leaves, which are essential to the nourishment of the tree, or plant, imbibing moisture from the air and rain. If the leaves are eaten by worms, the tree ceases to grow, until the foliage is renewed. The foliage constitutes a shade to shelter man and beast from the heat of a summer's sun, and is one of the most beautiful ornaments of the vegetable kingdom.

Nor must we overlook the herbage, or grasses. These are of great variety, and many of them grow spontaneously, and cover the surface of the earth with a carpet of green. This herbage is intended for the food of animals, and more especially of those which are destined for the domestic uses of man. This is a proof of the provident care of the benevolent Creator. We observe that those things which are most necessary for man, are furnished in the greatest abundance. Thus air, being essential to life, exists on every part of the globe, and is always at hand without the labor of man. Next to this is water, which is also supplied in the utmost abundance, and if not found on the surface of the earth, is treasured up beneath the surface, and accessible. So, also, herbage for the food of beasts is destined to grow in an abundance which human labor could not produce.

CHAPTER III.

THE ATMOSPHERE.

THE atmosphere is the fluid encompassing the globe, consisting of air, which contains water and other vapors. The air is an elastic substance, being capable of great compression. It is invisible, inodorous, and colorless. It is a compound substance, consisting of *oxygen* and *azote*, or *nitrogen;* about twenty-three parts of a hundred are oxygen; the remainder nitrogen. Oxygen signifies, a generator of acids; it is a gas which uniting with another substance forms an acid. Nitrogen is also a gas, and the word signifies, a generator of niter. It is called also *azote*, which signifies, *fatal to life.*

Oxygen is vital air, that part of air which is respirable, and is the support of animal life. It is also the support of combustion, or fire, and by itself produces intense heat. Nitrogen has opposite properties, for when inhaled into the lungs, it is instantly fatal to life. These facts exhibit a wonderful phenomenon; that when these substances are combined, they form another substance with properties different from those of the constituent gases, and the existence of which is essential to all animal life upon land, and to the life of many aquatic animals. Air is inhaled into the lungs by respiration, or breathing; the oxygen is separated from the nitrogen, and it is evidently the supporter of life, and the generator of heat in animal bodies.

Air, in the atmosphere, is combined with water, or holds it in solution, and the atmosphere is the vehicle which conveys water over the earth. Hence the formation of clouds, from which proceed rain, snow, and hail. This is a most wonderful contrivance to receive aqueous particles, and transport them to every part of the earth; for supplying water to nourish plants and to accommodate mankind in a thousand different ways. The atmosphere also receives exhalations of various kinds from the earth and from vegetables. It bears the fragrant odors of millions of plants and their flowers, and the *noxious malaria* or pestilential vapors of every fetid marsh

Meteors also are generated in the atmosphere, and often dart along with amazing rapidity, exhibiting a brilliant light around the hemisphere.

Pure air is essential to animal life. We cannot live many minutes without inhaling it. But respiration separates the oxygen, the vital principle, from the azote, and thus renders the air unfit to support animal life. It results from this known fact, that the lungs must be continually supplied with fresh air, otherwise we must suffer pain or perish. Hence it should be always remembered, that close apartments, in which persons sleep, must be replenished with fresh air, or the air will become impure and unfit for respiration. Large apartments are therefore most healthful for bed-rooms, for school-rooms, and for public assemblies.

Motion and agitation contribute much to the salubrity of air. Hence we observe the wisdom of Providence, in subjecting the atmosphere to frequent currents and agitations. Storms of wind are highly useful in preventing the ill effects of stagnant air.

Among the salutary causes of good air, we may remember the sea and land breezes, which blow with regularity in many parts of the world. These are particularly useful within the tropics. For instance, in the West Indies, a sea-breeze, cool and refreshing, begins to blow in the forenoon and continues till evening, when a land breeze commences and blows from land toward the water.

The use of wind in propelling ships on the water, is obvious. What an admirable provision for promoting an intercourse between nations separated from each other by the ocean, are the two fluids, water and air. Water is made heavy enough to sustain ships, and the lighter air is adapted to move them. And what an admirable adaptation of the use of wind, to the convenience of man, do we observe in the frequent changes of its direction. If the wind was to blow always in one direction, one part of men only could be accommodated; but frequent changes accommodate ships passing to all parts of the world.

These fluids, water and air, are also the instruments of propelling machinery for various purposes. Water supplies the force which is requisite to move wheels, in mills of all kinds, and manufacturing establishments. In most parts of the world, water is abundant for these purposes; and where there are no sufficient streams, the want is supplied by wind. Windmills are used for reducing grain to meal and flour.

There is one law of the waters of the ocean, which is of immense use to navigation, which is apt to be overlooked: this is the regular rise and fall of the water in tides. Many a ship, stranded in a gale, would be lost, were it not for the flood tide, which lifts from the earth and floats to the sea, what no human power is adequate to move.*

The tide is useful, also, in aiding the movement of vessels in rivers and narrow channels, when there is not wind, or when the wind is unfavorable. And the tide, also, furnishes the means of docking ships, when they require repairs.

It has been stated, that the air holds water in solution. Water is a combination of two gases, oxygen and hydrogen. Of a hundred parts, hydrogen forms about eighty-eight parts, and oxygen twelve.

These gases are invisible, unless when colored. But it is one of the wonders of creation, that of these two invisible gases, hydrogen, when separated from oxygen, is one of the most combustible or inflammable substances in nature, and oxygen is the support of combustion; yet, when combined, they form water, which is the most perfect extinguisher of fire.

LIGHT.

The atmosphere is the medium of light, that substance or property of matter which contributes, in a thousand ways, to the happiness of man. The great fountain of light is the Sun, that splendid orb, stationed near the center of the system, of which this globe is a part, sending its rays to all the vast globes which revolve around that center. By the revolution of the earth on its axis, once in twenty-four hours, the whole surface of the earth is presented to the sun, and illuminated during a part of that period. During this period of light, objects are visible, and men pursue the occupations which are essential to their subsistence and welfare. When this light is withdrawn, the earth is shrouded in darkness: men and other animals retire for repose, and recruit their strength by the refreshment of sleep.

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*It may be said that ships driven ashore at high water, have not this advantage. This is true; but high water continues but a short time; not a fifth part of the twenty-four hours.

Philosophers are not agreed on the point, whether light is *matter*, or whether it is the effect of vibrations of an ethereal substance. At present, opinions incline to the latter theory. The light of the sun, radiating from that beautiful and splendid orb, reaches the earth in about eight minutes, traversing nearly twelve millions of miles in a minute. Light is imponderable, that is, destitute of weight. It is often, or generally, attended with heat. When it falls on the earth, or any solid body, it generates heat, and to this element we are indebted for the productions of the earth. Were the sun to be extinguished, or its light for a long time withheld from the earth, rivers, lakes, the ocean, and all that lives and breathes, would soon be converted into solid ice.

Light is not only necessary to render objects visible to men, but is essential to the perfection of plants. Vegetables, growing in darkness, are destitute of their proper form, color, taste, and other valuable qualities, consisting chiefly of water. Hence such plants would not answer the purpose of food for animals, nor would they supply the healing art with medicinal properties. But more than this, they would lose all their native beauties; they would not delight the eye by their beautiful and brilliant colors, nor gratify the senses by their fragrance.

Light is, also, a source of cheerfulness; by this effect, contributing to the pleasures of life, and thus increasing the kindly affections of men for each other, as well as bodily health, by stimulating its regular functions. How gloomy is darkness! How the weary traveler, groping along in the darkness of night, longs for light, to illuminate his way and cheer his soul! How the mariner, struggling to save his ship amidst the billows of a tempestuous night, or in danger of running upon the shore, waits with deep anxiety for the dawn of the morning!

Light is the emblem of joy, comfort, and felicity; of knowledge, of wisdom, of prosperity, and of favor. In scripture, it represents the gifts and graces of the Christian. Christ is called the light of the world; his doctrines have dispelled the darkness of paganism, and of all false religion, and directed men to the true source of all spiritual good.

HEAT.

Heat is usually an attendant on light, and like light, it is destitute of gravity. Heat is essential to animal, as well as vegetable life. Some animals require more heat than others; but without a certain degree of heat, all animal functions and the process of vegetation must cease. The degree of heat necessary to render man comfortable, is indicated on our thermometers by about sixty or sixty-five degrees of elevation of the quicksilver. When well clad, the human body will sustain a much greater degree of cold, and may sustain life in a much higher heat. But the Creator has given a temperature to our atmosphere, which, with due care, accommodates men on almost every part of the globe.

It is worthy of remark, that vigorous action of the human limbs and body, generates an unusual degree of heat, by which means men may labor, with safety and comfort, in the severe weather of winter. On the other hand, perspiration in hot weather, by conducting heat from the human body, renders men capable of sustaining the extreme heat of summer, without danger or great inconvenience. In a moist atmosphere, when the perspiration is not free, men feel the most inconvenience from heat, and the body is unusually languid. But such periods are rare, and of short duration.

The uses of heat are innumerable. By heat our food is prepared. In this particular man differs from other animals, all which take their food in the temperature which nature supplies. By heat, metals are melted or softened, so that they can be hammered, and formed into any shape in which they are wanted for use. By heat, bricks and pottery are hardened. By heat, limestone is converted into lime, the material of a cement, almost indispensable for man. By heat, is made glass; one of the most useful productions of art. By glass, we survey and investigate the heavens, and with the telescope, we discover thousands and millions of stars, or worlds, not visible to the naked eye. Glass is permeable to light, but not to water; and hence we have the benefit of windows to admit light into our dwellings, while rain and snow are precluded. By glass, men, in the decline of life, are enabled to see small objects, and to read books which would, without this material, be illegible.

In cold climates, heat is essential to the lives and health of *men. But the* means of obtaining this heat are abundant. The forest supplies wood for fuel, and where this cannot be obtained, mines of coal, and fields of turf, and peat, furnish substitutes. To this we may add, that the fur of wild animals, and the fleeces of sheep, are adapted for clothing, as they are non-conductors of heat, and retain the animal heat generated in the body.

By heat, water for bathing is rendered very salutary to health. By the use of oxygen, a degree of heat is obtained which melts the most refractory substances, minerals of all kinds, and even clay. By heat, the qualities of plants are extracted in boiling water; and decoctions thus produced, are used, in innumerable ways, for the cure of diseases.

OF SOUNDS.

The formation of sounds is one of the most interesting phenomena in nature. Sounds are formed by vibrations in the air, occasioned by some impulse. These vibrations are compared to the concentric circles made in water, by a stone thrown into it; which circles recede from the point of contact, and become larger as they recede to a greater distance, and gradually subside. But sound is propagated in all directions, upward and downward, as well as in a horizontal direction.

The loudness of sound is supposed to depend on the extent of the vibrations. The longer chords of an instrument of music, as of a piano, produce the graver sounds; and the shorter chords, the higher or more acute tones. The gravest sound is said to be formed by about eighty vibrations in a second; the most acute sounds, by about a thousand in a second. The acuteness of sounds is increased by a greater tension of the strings, which renders the vibrations more rapid.

The production of sounds by the human organs, is a wonderful phenomenon. Sound, or voice, is produced in the larynx, a very small opening in the throat, and the difference of articulate sound arises from the form of the cavity which succeeds the sound. Articulation is the jointing or junction of the organs, and the sound is modulated by the succeeding cavity. Vowels are formed by the mere opening of the organs; and articulations modify these sounds in an indefinite number of ways.

It is surprising to observe the variety of sounds which may be produced by the human voice, by the instrumentality of the lips, the tongue, and the palate; nor is it less wonderful to observe with what rapidity different sounds are produced by the movements of the organs.. This faculty of speech in man, is derived from the construction of his organs, and is one of the principal faculties which distinguish men from the brutes.

Another wonderful phenomenon, is the difference of sounds in forming concords and discords. The reason why two sounds, with intervals between them, should be agreeable to the ear, and two other sounds should be grating and unharmonious, is not easily explained. But it is obvious that these properties of sound were constituted by the Creator for most valuable purposes. The intervals which constitute agreeable and disagreeable sounds, are established and uniform among men, and doubtless were established for the purpose of promoting human happiness.

That the laws of musical sounds were intended by the Creator for the happiness of men, is evident from the construction of the ear. The adaptation of the ear to the sounds, or the sounds to the ear, must have been the work of an intelligent and benevolent Author. The laws by which sound is produced, are not fully developed; but the effect of the properties of sound in harmony, and in the communication of thought from man to man, is acknowledged by all civilized nations.

Nor ought we to overlook the faculties of birds in producing melody. Simple and uniform as are the notes of most of them, they yet add a charm to the natural world, which should be numbered among the blessings bestowed on man by the Creator. How delightful is it to the eye, to see the little songsters, with their beautiful and infinitely varied plumage, darting from spray to spray in the field or the forest, and filling the air with the melody of their songs. Instead of the stillness and solitude of a desert, our fields and woods are enlivened by animation, and thousands of little warblers charm the laborer and the traveller with the melody of their notes.

If any thing can enforce the justness of these remarks on musical sounds, it is the consideration that music is represented to us in the scriptures, as constituting a part of the bliss of heaven. How impressive is that science, in which the redeemed of the Lord are represented as harping with their harps, and making heaven resound with the song of Moses *and the Lamb!*

MINERALS.

Minerals are among the most wonderful productions of nature. Many of these exhibit most beautiful forms and colors, and are used as ornaments; others subserve many purposes in the arts. Of these the diamond deserves special notice. This gem is white, and yet it is found to consist wholly of the same substance as coal, the blackest substance known.

The diamond is a rare mineral, and found chiefly in the province of Golconda, in India. It is valued for ornament beyond any other gem, and the finest specimens bear a price so high, that none but the richest men are able to purchase it.

But there is one quality of the diamond which renders it peculiarly valuable in the arts; this is its hardness. Hence it is used to cut glass, a substance that cannot be cut with iron or steel. By the help of this mineral the artisan cuts glass into any form which necessity requires, or fancy suggests.

To a careless observer, it would seem to be difficult to find, in the distribution and arrangements of the different strata of earths and minerals, any special provision for the accommodation of mankind. Yet, on an examination of the subject, we may discover abundant proof of such provision.

Thus in the alternations of clay, with beds of sand and gravel, we discover that gravel beds are the repositories of water beneath the surface of the earth, and that these lie upon beds of clay which is impermeable to water. Thus it seems to have been intended by the Creator, that these beds of gravel should contain water for man, who reaches it by means of wells, and by machinery draws it for use, at his pleasure.

METALS.

The benevolence and wisdom of the Creator, are remarkably obvious in the provision of metallic substances for the use of men. Look at the rude savage, without instruments of iron, hacking with a dull piece of copper or other less suitable tool, to fell a tree, and then laboring for weeks or months to excavate the trunk into a canoe. Then see him peeling a birch tree, and sewing the bark with threads of the inner bark of some other tree, or with the skin of some animal or plant, to form a basket or pail. Then learn the value of the metals.

Without iron men could hardly be raised to a civilized state, Iron enters into the structure of our houses, in the shape of nails; with iron, are the timbers framed, and fitted for connection by tenons and mortises. With iron, the farmer cuts his grass and grain; with iron, he forms vehicles for carriages; with iron, are made machines for manufactures; and of iron, are formed the most necessary tools and domestic utensils.

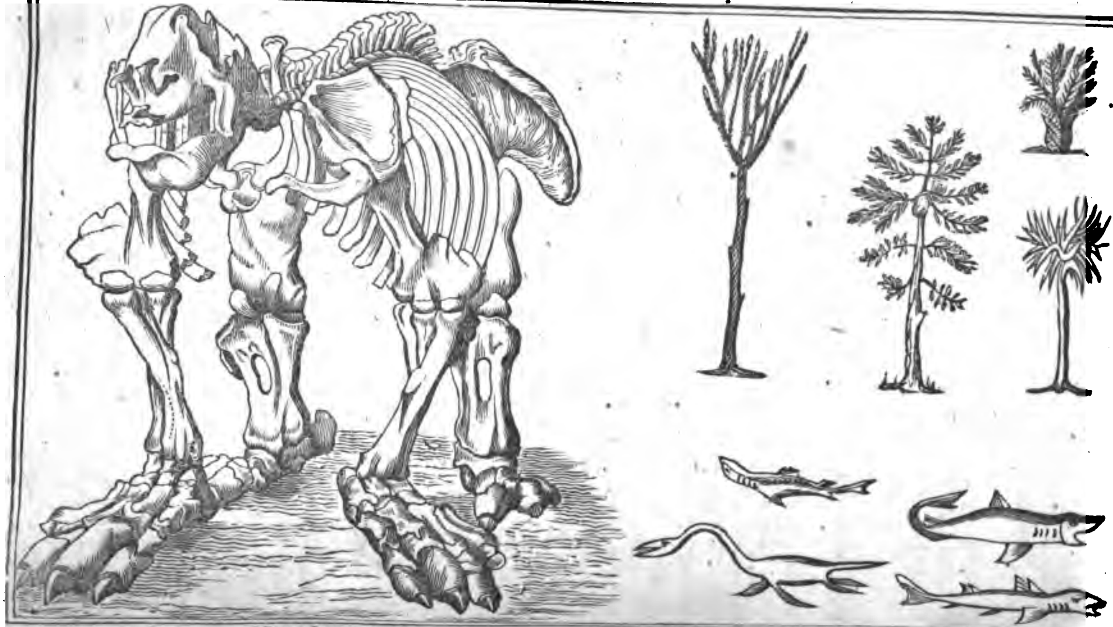
Zink, and copper, and antimony, and lead, and tin, are the materials of a multitude of utensils. With copper, the merchant sheaths his ships, and the artisan makes boilers and other vessels. With tin, or zink, the builder covers his house, and with a composition of metals, the founder casts type for printing. Of lead are made balls for artillery; and a mixture of arsenic with lead gives to small shot their rotundity.

Gold, and silver, and copper, are used for coin, the representative of value, in the purchase and sale of property. With what ease do men now convey the title to property, by means of a few small pieces of metal! Let this mode be compared with the rude commerce of the early nations of Europe, who used cattle in purchases, or of the American Indians, who use strings of shells, called wampum, for the same purpose.

Gold and silver are peculiarly well fitted for coin, by their hardness and durability, and by not being subject to rust. The malleability of gold is wonderful; it is capable of being extended, till it is thinner than the thinnest paper; and in this form of gold leaf, it is an excellent coating for other substances. The ductility of silver, which renders it susceptible of being drawn out to a great length, in wire, is a remarkable quality; and the same is true of iron. The fusibility of metals renders them susceptible of being cast in molds, in any form that the convenience of man may require.

The metal called mercury, or quicksilver, from its fluidity, has properties peculiar to itself. In its natural state it is fluid; nor can it be congealed under a temperature of about seventy degrees below the point at which water freezes. This property renders it most convenient for thermometers and barometers. In thermometers, it is expanded in a tube by heat, and in barometers, it is raised or depressed by different degrees of the weight of the atmosphere.

In these metallic bodies, we observe how admirably the variety of them and of their properties is adapted to the wants of mankind. No human mind, however cultivated, could have devised articles so well suited to the condition of the human race, as the Creator has provided for us.



Megatherium.

CHAPTER IV.

ANIMALS.

Wonderful discoveries in Geology. Description of the MEGATHERIUM, *an extinct animal.*

THE name of this animal, from the Greek, signifies the *huge beast.* The fossil remains of this animal are found chiefly in South America, particularly in Paraguay; some remains have been found in North America, and in other countries.

In some parts of the organization, this animal resembles the Sloth, presenting apparent monstrosities of external form, and some strange peculiarities of internal structure.

From the construction of the bones of the head, it is probable that the animal had a long snout, somewhat like that of the tapir, which was used for rooting in the earth for food. He had no incisors, or tusks, but molar teeth; proving that he could not subsist on herbage, and that he was not carnivorous.

The lower jaw was very large, affording deep sockets for the molar teeth. The vertebers of the neck and back, were rather small, but those below were larger, and the bones of what may be called the loins, indicate extraordinary strength. The tail was very long and large; being at its largest end six feet in circumference.

The entire fore foot must have been about three feet in length, and twelve inches broad. The toes were terminated by large claws of great length, set obliquely to the ground, like the digging claws of the mole, and well adapted for excavation of earth.

The pelvis and cavity of the abdomen, were more than five feet wide. The bones of the thigh are of nearly three times the thickness of those of the elephant. The breadth is nearly half the length, which is two feet four inches. The bones of the leg were united at both ends, and very strong. The heel bone was seventeen inches in length, with a circumference of twenty-eight inches.

This animal seems to have been provided with a bony coat, covering his hide, and somewhat resembling the armor of an armadillo.

The whole body of this beast must have been twelve feet in length, and eight feet high. His form was not suited for swift loco-motion; but his apparatus was well adapted for digging to obtain roots for subsistence.

ICHTHYOSAURUS, *an extinct animal.*

The name of this animal, from the Greek, signifies *fish-lizard.* Animals of the lizard species are called, from the Greek, *saurians.* The fossil remains of animals of this kind, in the formations of the secondary series, are numerous and extraordinary, indicating that some of them were aquatic animals, of gigantic size and of similar structure.

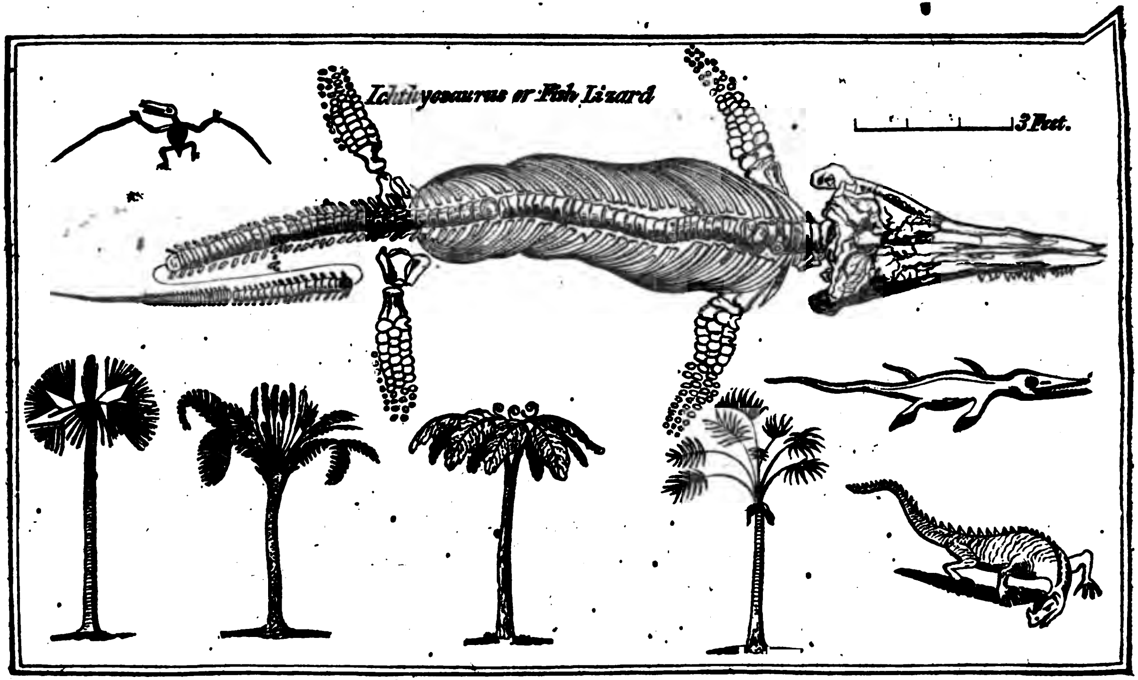
The general form of the Ichthyosaurus most nearly resembles that of the porpess and the grampus. This animal had four large broad feet, or paddles, and terminated in a long and powerful tail. Some of the largest animals must have been thirty or forty feet in length.

The head of this animal shows that it was a reptile, partaking of the character of the modern crocodile, but more nearly allied to the lizard. The eyes were enormously large; the jaws prodigiously long; some of them exceeding six feet in length.

The teeth are conical, and much like those of the crocodile, but more numerous, amounting, in some animals, to one hundred and eighty.

The vertebral column was composed of more than one hundred joints, and was constructed somewhat like that of fishes. The ribs were slender, and most of them bifurcated at the top. They were continuous along the whole vertebral column, as in the modern lizards.

The anterior paddles, and the bones of the sternal arch on which they rested, were of prodigious strength. The posterior paddles were of less size. The whole structure was adapted for rapid motion in the water. The power of rapid movement must have been necessary for these monsters of the deep, as they preyed upon fishes, which, also, were endowed with the power of rapid flight from their enemies.



Fossil Plants.

In the animal kingdom, we discover innumerable proofs of the same wise design and benevolence of the Creator, which exists in other departments of creation. These proofs are seen in the adaptation of animals to the climate, soil, or element in which they are to live; in the provision made for their subsistence; and in their fitness to subserve the interests of man in particular regions.

The camel is a native of Asia and Africa, and is formed for inhabiting the sandy deserts. His fitness for such a region is remarkable in two particulars; the formation of his feet, for traveling on burning sands; and the form of his stomach, which consists of several compartments, in which the animal may carry water for several days use. This structure of his stomach is evidently intended by the Creator, to enable him to make journeys over a desert where no water is to be found.

The camel is called the "Ship of the Desert;" for he is employed to convey heavy burdens, in a region where carriages cannot be used. Before the discovery of the southern part of Africa, now the Cape of Good Hope, camels transported all the merchandise that passed from Asia to Europe. They are still employed in carrying goods and provisions in the caravans, which visit Mecca and other places, from Syria and the northern part of Africa.

The elephant is another animal fitted to live and travel on deserts. His feet consist of a strong fleshy substance, covered by a thick, callous skin, which fits him to travel on the sand. He has a short neck, and cannot feed himself from the ground; but he is furnished with a proboscis, or hollow trunk, which he can extend six or eight feet; with this he takes his food and conveys it to his mouth.

These animals are capable of being domesticated and subjected to the dominion of man. If these huge animals were as ferocious as the tiger, and incapable of domestication, they would be of no use to mankind; but they would be their most formidable enemies.

Most of the animals intended for the use of mankind, are fitted to live in different climates. Such are the horse, the bovine genus, the sheep, the goat, and the dog. These all live and thrive in most of the habitable latitudes; their varieties are multiplied, and their properties improved by cultivation: and in this manner, they are the instruments of great use and profit to their possessors.

If we turn our eyes to the polar regions, we see fewer animals, for many species which are useful in warmer climates, would be of no use in the frigid zones. And there we observe the animals are protected from the cold by fur, the most perfect non-conductor of heat; and their skins furnish the inhabitants with clothing of the warmest kind. Such is the law of the Creator, that the finest and warmest furs, are produced only in the cold regions of the earth, and the fine coat of the sheep in the north, when carried to the south, is changed into coarse wool, like hair.

Animals furnish mankind with their most nourishing food. It is a general law of creation, that the flesh of most herbivorous animals, is palatable for men, and most of the domesticated animals furnish the best of food. The flesh of carnivorous animals, is coarse and less palatable. But we observe, that in the arrangements of Providence, the animals most useful in their lives, as the ox, the cow, and the sheep, when they are too old for service, are converted into food for mankind, and they are as valuable when they are old as when young.

But this is not all. The skins of animals, as well as the wool of the sheep, are converted to use. From the hides of the ox, the horse, and the sheep, is formed lether for shoes, for harness, and numerous other uses. Even their bones may be converted into food, by long boiling under a high degree of pressure, as in Papin's Digester, and they are actually converted by pulverization, into manure of the best kind. Great quantities of bones are imported from the continent into England for manure.

It is thus that we see marks of design, of wisdom, and of benevolence in the works of the Creator. Every animal is fitted for his climate, and his mode of living where food is furnished in sufficient abundance; everywhere animals are adapted to the use of man; every part of the animal is capable of being converted to some useful purpose; nothing is lost; nothing is made in vain.

In the form of different species of animals, we see a particular adaptation in each to their modes of life, their manner of feeding, their means of shelter and defense, and to their preservation of the species. We see some quadrupeds of the bovine species, and ruminating animals, destitute of front teeth in their upper jaw. These twist off the herbage and swallow it; but having more stomachs than one, they intermit feeding, throw up portions of the herbage in succession, and chew it at their leisure; while at rest.

The horse is built for strength, beauty, and activity. He has front teeth in his upper jaw ; he bites off the herbage and chews it as he feeds. As he is destined to travel on all sorts of ground, stony as well as smooth, he is furnished with hoofs of horny hardness, to preserve his feet from injury.

The rapacious and carnivorous beasts, have claws fitted to seize and hold their prey, and teeth shaped for tearing the flesh.

Animals that are destined to climb trees, are furnished with sharp nails for the purpose ; and the small animals which subsist on nuts, have sharp teeth to cut the shells.

Animals that are destined to burrow in the earth, have paws with nails fitted for digging ; and such as are torpid during hybernation, at the approach of winter lose their activity and become sleepy, before they enter their burrows for the winter.

Animals that creep without feet, are supplied with scales or rings which, by extension or winding, take hold of the ground, and enable them to move forward. Such is the form of serpents, and some species of worms.

Animals are, also, armed by nature for defense. Some quadrupeds use their horns for this purpose ; others their teeth ; others their hoofs ; others have sharp spines which they present to the assailant ; others have stings.

Animals have different modes of bearing and nourishing their young. The mammifers have breasts which supply their young with milk ; other animals supply the same nutriment in a somewhat different manner. In some instances, the young require no care, but are so formed as to subsist by their own efforts.

The organization of *winged* or *flying animals*, which is the signification of the generic term *fowl*, is peculiarly fitted for the fluid in which they are destined to move. Their lungs, their bones, their cellular tissue, their fethers, are all filled with air ; by which means their bodies are remarkably light. Yet by the strength of the muscles of the wings, and the efficient steering of their bodies by the tail-fethers, and the head, they baffle the force of the winds, which would otherwise disturb their direction in flight.

Men have taken the form of ships, from that of aquatic fowls.

Those fowls which are destined to sit and sport among the branches of trees, called *perchers*, have separate toes, ending in hooked nails, by which they cling to the slender twigs. Those which are destined to swim in water, have toes connected by a membrane, which serves as a paddle. Some being destined to choose a hollow tree for their nests, are furnished with large strong beaks, with which they peck holes in which they deposit their eggs.

Fowls which are destined to feed on grain, seeds, and small insects, have pointed bills; those which are carnivorous have hooked beaks for tearing flesh; and aquatic fowls, which subsist on fishes, have long naked legs for wading, and long beaks for taking their prey; or they have claws for seizing their prey by diving, and bearing it aloft through the air. The tail of fowls, consisting of long fethers, usually twelve in number, is the instrument of steering; serving this purpose much in the same way as the rudder steers a ship, by being turned one way and the other, to make resistance on one side, as the occasion requires.

The care which animals manifest for their young, is worthy of particular observation. It is especially observable in those animals whose young are helpless, which is the case with fowls. What patience does the female manifest during incubation! How careful not to leave her eggs long enough to become cold! And when the chickens are hatched, it is delightful to see how unremittingly she is employed in finding the proper food to nourish them. In cold or rainy weather, she broods them to keep them dry and warm; and when an enemy approaches, she flies about in an agony, filling the air with her screams. No human being, in her tender care of her babes, can surpass the female bird in the care of her young. These instinctive affections must be implanted by a benevolent Being for the wisest purposes.

The instincts of animals are very remarkable. The whole process of birds in selecting a suitable place for their nests, and in collecting and adjusting the materials in a proper form, is wonderful. The children of the human race come into the world ignorant of every thing—they have every thing to learn; but the young bird needs no instruction; she knows as well how to make a nest or to collect food, as the parent bird. The young of water fowls run fearlessly into water, as soon as they see it; while the young of the gallinaceous hen cannot be driven into water at all.

> "And reason raise o'er instinct as you can,
> In this 'tis God directs; in that 'tis man."—*Pope.*

Fishes have the following characteristics: they have a body with a vertebral column, covered with scales, and moved by fins; they respire by gills; the heart has only one auricle and one ventricle; and their blood is red. In breathing, fishes decompose water; the air is separated and oxygenates the blood by means of an artery running lengthwise at the margin of the gills. It is conveyed to the heart and then distributed to all parts of the body. By this admirable structure of the organs, fishes are enabled to live in water; a striking evidence of Divine wisdom.

The fins of fishes are membranes supported by bony or cartilaginous rays, which open or shut like a fan. Some of the rays are entire; others are jointed. Most kinds of fishes are covered with scales for protection; these are different, but generally they are plates of different forms. These are closely set, and in many fishes they are imbricated, lying like tiles on the roof of a house.

Fishes move with great rapidity. The tunny is said to dart along like an arrow, and herrings are said to go at the rate of sixteen miles an hour. The shark will often follow a ship for days and weeks, to catch any refuse of food thrown into the sea. The eyes of fishes are in general not protected by a lid or nictitating membrane; but are of a substance which receives no injury from the access of water. Fishes have no external avenue for hearing; but their sense of smelling is said to be very acute. The organ for this purpose is between the eyes. They have teeth of all kinds, for tearing, cutting, and grinding their food.

Fishes are long-lived animals. A pike, in Germany, was taken and had a ring fastened to the gill-covers, in the year 1487, and was taken with the ring upon it in 1754; so that it must have been two hundred and sixty-seven years old. How old the pike was when first taken, or how long it might have lived after it was last taken, cannot be known. It was nineteen feet long, and weighed three hundred and fifty pounds. It is alledged that fishes kept in a pond, as trout, carp, and tench, may be taught to obey a call, or the sound of a bell.

As fishes have no apparent organ of hearing, they may receive impressions from an impulse on water, by sound.

In various kinds of fishes, we see forms of body fitted for rapid movement. The general form presents a strong front to part the water, and from the head or breast, an easy slope to the tail; a form which probably makes the least possibly resistance to motion in that element. Their fins keep the body in its proper position, and with the tail, they propel the body with astonishing rapidity.

Entomology presents a thousand facts of a similar tenor, to display the wonders of creation. Innumerable insects people the earth and the air, with infinitely varied forms of life and beauty, all furnished with the organs necessary for their subsistence and safety. Who can see the art of the spider in spinning a net for its prey, or the industry and ingenious workmanship of the bee, constructing its cells with the exactness of a geometrician, without exalting his thoughts to the Supreme Artificer of the Universe, who, with equal wisdom, creates an insect or a world!

Among the wonderful habits of animals, we must not overlook their migrations. This habit seems, in fishes, to be designed for spawning or for procuring food. Herrings move from the north in shoals, which crowd the surface of the ocean for many leagues in length and breadth, followed or attended by sharks and rapacious fowls, which feast upon them. Mackerel, cod-fish, shad, and salmon, also move from place to place, and when they approach our shores, or enter our rivers, furnish an abundance of food for man.

Many kinds of fowls migrate from the north to the south, to avoid the cold of winter. This is remarkably the case with the various species of ducks, and of wild geese. The latter fowls pass the summer in the regions about the mouth of the river St. Lawrence, or on the Labrador coast. In autumn they take wing for the southern climate, moving in the form of two unequal sides of a triangle, and making the air resound with their hoarse cries.

There is a species of land crabs, in the West Indies and South America, inhabiting the mountains, which annually descend in armies and steer their course to the ocean, for spawning. In their progress they proceed in a direct line, climbing houses, surmounting every obstacle, and destroying vegetation with their claws. They bathe in the water and return; but some of them so lean and weak, that they stop to recruit.

The migrations of fishes and fowls are of great importance to mankind; for they bring, from their native waters, and place within the power of men, immense quantities of food. This is more especially the case with fishes, shoals of which visit the shores of Great Britain, and other countries, as other kinds do the coast of North America.

It seems to be the purpose of the Creator, that to prevent particular animals from over-stocking the land and the ocean, certain species should feed upon other species. Many species of animals are the food of men; many species of wild animals feed on others; and many species of fish devour the smaller species. The birds which feed on insects lessen the ravages of worms and the annoyance of flies; and fowls and insects consume many substances which, if left upon the earth, would generate an offensive or pestilential air.

It is remarked by an English writer, that there is a singular contrast between most vegetables and animals in the following respects: the head of the animal, and the root of the plant, perform the same office—that of collecting and absorbing the nutriment of each. The animal derives nutriment from *organic* matter; that is, from plants and animals; the vegetable, from *inorganic* matter; that is, from water, air, and manuring substances.

The plant gives oxygen to the air; that is, a salubrious gas; but to the earth it gives leaves and ligneous matter, which, when digested, fertilize the ground. The animal gives nitrogen to the air, and rejected matter to the earth. From these facts it is observed, that in the economy of Providence, vegetables help to furnish the atmosphere with pure air, and animals contribute to supply the earth with fertilizing substances, which are the food of plants.

The animals denominated *zoophytes*, which signifies *animal plants*, or vegetable animals, were so named, because they were supposed to partake of the nature of both animals and vegetables. But it is now considered that these are really animals. There are others which seem to be of a doubtful nature. These are called *protophytes*, first plants; and *protozoa*, first animals; and from certain oscillatory motions, they have been called *oscillators*. The latter circumstance is claimed as an evidence that they are of the animal kingdom.

These animals are now known by the term *infusories*, from their being infused in fluids.

The infusories are said to have, at least most of them, a mouth and digestive system; many of them have eyes; some appear to have nerves and sensation; they exhibit great variety of forms, and every variety of motion. Some appear to take food by absorption, having no mouth; to this class belongs the little animal which may be seen by the naked eye in vinegar.

Animals of this kind inhabit the sea, rivers, and other waters; they are found in the blood, in animal substances, in vegetables, in vinegar, in fruits, in seeds, and in grain; in wells and on mountains. Their numbers are infinite; hundreds of thousands may be seen in a drop of water. One variety of these animals is called *rotaries*, or animalcules resembling a wheel. Some of them are called *polygastrics;* that is, animals having many stomachs.

These animals exhibit the wonderful power of the Almighty. That such minute creatures can have organization, life, spontaneous motion, appetite, digestion, nutrition, and powers of reproduction, are astonishing facts. They are found every where; in our blood, in our food, and in almost all substances; but were never seen by man till the microscope was invented; and yet, they out-number all other animals on the globe.

These minute animals may, and probably do furnish food for larger animals, as of the polypes, the builders of coral rocks; and perhaps of the molluscans, and crustaceans, and other larger animals, as small fish which seem to subsist wholly on water, and this water may swarm with infusories. It is thus a chain of animal life is formed, from the minutest infusories to the highest order of animals.

The polypes are the animals which construct the coral rocks in the ocean. They have been numbered with zoophytes, or animal plants, and they were formerly considered to be a vegetable production. Some of these animals appear to be a mere gelatinous mass, without any organs of prehension; but most of them have a mouth, with arms or tentacles, which serve as organs of prehension and motion. Their body is a kind of inspissated mucus, covered by no skin, very contractile, with an alimentary sack, open at both ends. There is an equal distribution of nervous molecules through the whole substance of these animals.

The polypes abound in our ditches and stagnant water. In these the canal is naked and branching, without any support, but endued with the power of loco-motion. But the polypes are most numerous in the ocean. They form vast rocks or ledges of coral. In the madrepores, this animal constructs for itself a house, polypary, or polypier, of calcarious matter, with innumerable cells, each containing a separate animal, with a mouth and tentacles, but united to the general body at the other extremity, and each with an aperture, by which they are protruded and expanded like a flower.

In the coral, this animal forms an internal calcarious axis, investing it, as bark invests a tree. It is fixed by its base: and from this crust or bark, emerge the mouths of the polypes, with their tentacles, or feelers. In these two last, the base, by which the compound animal is fixed to rocks, expands like the root of a tree, and the ramifications of the polypes resemble the branches of a tree from its stem. There are other forms of polypes, called *sponges*, *alcyons*, and *sea-pen*, which seem to be more nearly allied to vegetables, but are deemed organized animals. The sponges are well known, and now form an article of commerce.

The polypes multiply either by germs or by cuttings. The germ issues from the body, like the branch of a tree from its stem. This is a protrusion of the skin, which after awhile detaches itself from the parent stem, and becomes a separate animal. In this way one polype may, it is said, produce a million of new animals, within a month.

The other mode of multiplying is by cuttings. If a polype is cut into parts, each segment will become an animal. It is asserted, that if one is divided longitudinally, each half will form a separate tube in an hour, and begin to ply his tentacles within a day. And what is still more wonderful, this animal may be turned inside outward, like a glove or a stocking, without destroying its vitality, its power of catching and swallowing food, or its power of producing germs.

There is hardly any thing in natural history more extraordinary, than the formation of rocks by polypes. In many parts of the ocean these rocks form immense reefs, extending far from land, and exposing the navigator to imminent danger. In many places these coral rocks, formed by minute animals, are the basis of large isles, which are covered with vegetation, and become the residence of men. The rocks are said to be formed by animal matter and the carbonate of lime.

In some instances, these rocks form ridges, which extend without interruption for several degrees, constituting a solid rampart to resist currents in the ocean. Sometimes they are in a circular form; some are extended on the bottom of the sea, following its curvatures, and covering the bottom with an enameled carpet of various and brilliant colors; sometimes of a single color of dazzling purple.

That these minute beings, with no other organ than a few tentacles around their mouth, should be fitted to secrete calcarious particles from their food collected from the water, and to discharge this matter in quantities to construct innumerable lime-stone-houses, and thus, in process of time, to form whole groups of isles for producing plants and fruit-trees for the sustenance of a numerous population, is one of the most wonderful phenomena on the globe. We are unable to account for the fact, that millions and myriads of millions of these little animals, scarcely elevated, in the rank of beings, above vegetables, should, in all parts of the ocean, continue to work, each in its proper mode, from age to age, in producing such immense beds of coral-rocks—but by admitting the existence of an Almighty Being, who has given to them instincts suited to this end; instincts as uniform in their operation as any of the laws of creation.

The radiaries are animals of a somewhat higher rank. These take their name from their disposition to form *rays*, both in their external and internal parts. These can not be propagated by cuttings and offsets, like the polypes. They are divided into rays, as in the star-fish; or have rays exhibited in their crust, as the sea-urchins; or embedded in their substance, as the sea-nettle and jelly-fish.

These animals are divided into two orders, *gelatines* and *echinoderms*. The gelatines are distinguished by a gelatinous body and a soft and transparent skin; they have no retractile tubes, and no interior cavity, their viscera being embedded in their gelatinous substance.

The echinoderms, which take this name from their having spines on their skin, resembling those of the hedgehog, have an opake lethery or crustaceous skin, mostly covered with tubercles, or movable spines, and generally with holes in rows. They have retractile tubes which receive and eject water, and are used, also, for loco-motion and prehension. These emerge from the holes. They have a mouth generally situated below, and armed with hard parts; and a cavity simple and divided.

The gelatines are found as large as a nutmeg, and transparent. They are phosphoric, and in the night millions of them present a most brilliant spectacle. From their rotary motion, they seem like globes of fire rolling on the surface of the sea. When cast upon the shore, they dissolve with a touch, being extremely delicate. They are eaten by whales. The echinoderms have an envelop much harder than that of the gelatines, and they have a high degree of muscular power, with organs for motion.

Another species of these animals are called *tunicaries*, from the circumstance that they are covered with a double *tunic*, or envelop. They are either gelatinous or lethery. They have an aperture for respiration and nutrition; an oblong body with many cavities; gills, a mouth, and an alimentary tube open at both ends. They are simple, or aggregate; floating, or fixed to rocks.

A species of these animals is called *pyrosomes*, fire-bodies, which are the largest of the phosphoric animals, being from five to fourteen inches in length. When they are seen in great numbers, the sea appears to be on fire, with dazzling light and brilliant colors, passing from red to saffron, to orange, to green, and to azure. They float and are wafted by waters and currents.

OF THE UNIVERSE.

It has been observed, that the sun, and the planets which revolve around it, constitute what is called the solar system, of which this globe is a part. The distance of the earth from the sun is supposed to be about ninety-five or ninety-six millions of miles. Of course the diameter of its orbit is one hundred and ninety millions of miles; and the velocity of its motion, in its annual revolution, must be about sixty-five thousand miles in an hour.

But this globe is one of the smallest of the planets, and least distant from the sun. Uranus, the most remote planet, is eighteen hundred and twenty millions of miles from the sun, and its revolution in its orbit, constituting its year, is equal to eighty-three of our years. This system is but *one* amidst innumerable other systems. The fixed stars are, with probability, supposed to be all suns, or centers of other systems. Of these about two thousand are visible to the naked eye; and Herschel's telescope reveals to us many millions of such stars, which the unassisted eye can not discern.

This view of the universe, imperfect as it is, oppresses the human mind with the contemplation of its vastness. But when we look around this globe, and see the multitude of human beings, and the unnumbered millions of animals and plants on the earth and in the ocean, with all the apparatus contrived to supply their wants, and all their diversities of form, of color, and habits—how amazing is this view of all these works of the Almighty! And when we consider that this globe is but a speck among the untold millions of immensely larger globes which occupy the regions of space, we are struck dumb with amazement; we involuntarily shrink from an attempt to grasp, in idea, the immense domains of the Almighty.

With this view of the vast works of creation, how diminutive and insignificant a being must man appear to be! How readily must we feel the force of the exclamation of the Psalmist, "When I consider the heavens, the work of thy hands, the moon and the stars which thou hast ordained; Lord, what is man that thou art mindful of him, or the son of man, that thou visitest him!"

But the works of God are not too large for his power, too complicated for his skill, nor too minute and various for his inspection. The Being who constructed and established millions of worlds by his power, has the power, also, and the wisdom to govern the whole.

Not an animal or a plant, not a mineral, not a particle of matter escapes his notice, or is neglected by his providence. Nor is the minutest organized being, with all its parts and their adaptations to their purposes, less evidence of his Almighty power and wisdom, than the creation of the globe or of the solar system. The very minuteness of organic being is the highest proof of his perfection.

Man, therefore, however small he may appear amidst the wonders of creation, is not overlooked and neglected by his Maker. He is furnished with ample means of subsistence and protection, and has reason to guide him in the selection and use of what his wants require. He has laws given to him to direct his social actions, in a manner to produce the greatest good; the very hairs of his head are all numbered. Every thing in his physical nature, and in his moral character and relations, is under the unremitting care of the watchful providence of an Almighty guardian and governor.

The works of creation, and the laws by which they are governed, are demonstrative proofs of the existence of a supreme, intelligent, and Almighty Being. Mere matter exerts no power; the Creator must be a being possessing intelligence, capable of acting; and the act of creating implies the highest power which we can suppose to be possible.

Order and harmony in created things imply design and wisdom; these are manifested in the uniform operation of the laws of matter. These laws admit of no alteration, no failure, no deviation, no suspension, except by their Author; they are as permanent and unchangeable as the perfections of the Almighty himself. Hence the safety of good men under the superintendence of their heavenly Father. As the works of nature demand our unqualified belief in the being and perfections of God, so the unchangeable character of his perfections and laws, demands our unwavering confidence in his promises.

CHAPTER V.

OF MAN.

Structure of the Human Body.

MAN is the English name of the human race, and the word in English, like *Adam* in Hebrew, signifies form, image, likeness. This name was given to the species by way of eminence; man being in form, and in intellectual and moral endowments, superior to all other terrestrial beings.

The head of man consists of several bones, called the skull, inclosing the brains, which are supposed to be the seat of reason. In the front is the face, in which are placed the eyes, organs of sight; the ears, organs of hearing; the nose, the organ of smell, containing the nostrils, or orifices by which air is inhaled into the lungs; and the mouth, the opening by which are received food and drink. Within the mouth are the teeth, the instruments of mastication or chewing, and the tongue, the principal instrument of taste and speech. From the head proceeds the spine, a long column of bones, which are vertebers, or turning joints, reaching to the lower part of the body.

The head is united with the body by the neck, containing seven vertebers, which admit the face to be turned from side to side, without any movement of the body. This admirable provision for the convenience and safety of man, ought to be particularly noticed.

In the neck is the gullet, or esophagus, the canal by which food and drink are conveyed to the stomach; also the windpipe, or trachea, which gives passage to air descending to the lungs. The upper part of the trachea is called the larynx, a very narrow opening for the air, the mouth of which is called the glottis.

At the glottis are formed sounds in speaking and singing. To prevent substances taken for food or drink, from entering this canal and passing to the lungs, instead of the stomach, there is a cartilage, called epiglottis, which, when a person swallows, covers the glottis like a valve.

The part of the body below the neck, to the midrif, or diaphragm, is called the thorax, or chest, the fore part of which is the breast. The bone in the middle of the breast is the sternum, and the hinder part of the chest is the back, composed of twelve vertebers, and the shoulder blades. The thorax is fortified by ribs on each side, attached to the sternum at one end, and to the vertebers at the other. These are peculiarly necessary in respiration.

The thorax contains those vital parts, the lungs and the heart. The lungs consist of two lobes, attached to the sternum in front. These are the essential organs of respiration, and receive the air through the trachea, or windpipe.

The heart is situated nearly in the middle of the thorax, and is of a conical shape. It is surrounded by a thin membrane, called the pericardium, which contains a little fluid, or moist substance, for lubricating that organ.

The heart has two auricles, or little ears, which receive the blood from two veins; one discharges the blood into the right ventricle, or cavity; the other drives the blood from another vein into the left cavity, or ventricle. These ventricles are furnished with valves which close and prevent the blood which they receive from returning.

The left ventricle is a strong muscle, which has two motions; one called the diastole, which dilates, and the other the systole, which contracts. By the contraction of this ventricle, the blood is propelled into the great artery, called *aorta*, and carried to every part of the body. Every contraction of this muscle causes a pulsation.

The pulmonary artery receives the blood from the right ventricle, and carries it to the lungs, in which it is by respiration, or the air, fitted for the support of life. The blood, by passing through the arterial system, loses its florid color, and its property of supporting life; but being returned to the lungs, its florid color is renewed, and it is again supplied with its vivifying quality.

The arteries are canals, or tubes, which convey the blood to all parts of the body. For the purpose of distributing this fluid, the arteries, at various places, branch into smaller arteries. The veins are canals, or tubes, which anastomose, or unite by their mouths with the arteries at their extremities, receive the blood from them and return it to the heart. And it is worthy of notice, that the arteries generally lie deeper in the flesh than the veins, and are less liable to rupture; as the rupture of an artery which conveys the blood *from* the heart, is more dangerous to life than the cutting or rupture of a vein which returns the blood *to* the heart. This process of the blood from and to the heart is called the *circulation*.

Amid all the wonders of creation, none is more worthy of notice, than the *respiration* and *circulation* in animal bodies. Both these are *involuntary*; that is, they are carried on without an act of the will, whether we are awake or asleep. This is a striking instance of the wise and benevolent design of the Creator, in the formation of the body, and of a watchful care that our lives should be continued without the least exertion of our own power or will; for a suspension of respiration and circulation is followed immediately by death.

The nerves are medullary chords, deriving their origin from the brain or marrow in the spine. Of these there are thirty-nine or forty pairs; nine proceeding from the medulla oblongata, in the skull, or from the spinal marrow. These are distributed to the exterior parts of the body and extremities. The nerves convey the principles of motion and sensibility to the brain from all parts of the system.

The eyes are contained in two orbits below the forehead. The form of the eye is nearly globular, and it is moved in all directions by muscles. It is composed of six coats and three humors. The latter are the aqueous, the crystalline, and the glassy. The aqueous humor supplies the moisture of the eye. At the bottom of the cavity of the eye is the retina, so called because it resembles net-work, (Latin, rete, a net.) This is a fine expansion of the optic nerve, upon the glassy humor. This is the coat on which the impression of objects is made, constituting sight. By means of the contraction and dilatation of the *uvea*, one of the coats, the pupil of the eye precludes a portion of light, when it is too strong, and in darkness it expands to receive additional rays. In this we see provision is made for the accommodation of man, without any exertion of his own. The eye is an example of wonderful wisdom in the Creator.

Above the eyes are the brows, which serve to break the rays of light, falling on the eyes, and by their bushy texture, and arched form, they add much to the beauty of the face.

The lids of the eyes are intended to cover and protect the eyes from dust, insects, and other annoyances, by day and in sleep; and for this purpose, they are moved with a rapidity, which has given rise to the proverbial phrase, *as quick as a wink*. These lids are also fringed with hairs, which serve as a protection and an ornament.

The ears are the organs of hearing. They are so formed as to receive sounds on a large surface, and convey them to the auditory nerve, through a narrow passage.

The nose is a prominent member, adding beauty to the face. It contains the nostrils, or orifices leading to the organs of smell, and furnishing canals to carry air into the lungs.

The hair of the head serves as a covering and a protection, and it is also a prime ornament.

The stomach is situated immediately below the midrif. Its form is that of a bag-pipe. It has two orifices, one at each end. The left orifice is united with the esophagus, and is the passage for nutriment to the stomach. When food is digested, it ascends to the right orifice, or pylorus, which conducts it to the first of the intestines.

The stomach is the reservoir of all food and drink, in which is carried on the process of digestion. For aiding this process, the stomach secretes a fluid, called the gastric juice, which changes the substances eaten into a kind of soft paste, or chyme; and this being further changed into chyle, a milky fluid, is prepared to enter the fine vessels, called lacteals. These supply that vital fluid, the blood.

The abdomen, or lower belly, contains the stomach, liver, spleen, kidneys, bladder, and intestinal canal. The liver is situated under the false ribs, on the right side. It consists of two lobes of a glandular substance, and its use is to secrete bile.

The kidneys are two oblong bodies behind the vertebers. They separate the urine from the blood, and the urine is conveyed to a receptacle below.

The spine, or chain of bones in the back, contains all the vertebers, which are twenty-four in number.

The bones of the body, stripped of flesh, are called a skeleton. Bones are hard substances, but are full of little cells. They are larger at the ends than in the middle, and for this reason the joints are stronger than they otherwise would be. Their principal substance is phosphate of lime. The bones form the animal frame, which sustains the flesh, vessels, blood, and all the viscera.

The skin is of two kinds; the skin proper, and the scarf-skin, a thin cuticle which covers the skin. The skin is the substance that covers and protects the whole body. It contains pores and excretory vessels, and the organs of sensation. The susceptibility of the skin renders us careful to guard against injury, as the least violence offered to it gives pain.

The limbs of the body are the parts which are the principal instruments of motion and action; as the legs and arms. The joints which connect them with the body, are of different constructions, adapted to the uses of the limbs. One of these joints is formed by the round end of one bone, which is inserted in the cavity of another. This is called the ball and socket. This joint admits the limb to turn in all directions. Such is the joint of the shoulder, which connects the arm with the thorax. It is easy to understand how important such a joint is to the various motions of the arm.

The lower end of the arm is articulated with the bones of the fore-arm, at the elbow; these bones are the ulna and radius, which extend to the wrist. The radius is the inner bone. The articulations at the wrist give free use to the hand in all directions. By the admirable form and joints of the arm, this limb is adapted to embrace objects, and to exert the actions of thrusting, striking, and swinging; actions that are necessary in manual labor.

At the extremity of the fore-arm is the hand, which is so united with the arm as to be readily turned in any direction. The hand has four fingers and a thumb. These have each three bones and joints, which are necessary for bending to grasp objects. The thumb is thicker and stronger than the fingers, as being intended for strength sufficient to balance that of the four fingers. For this purpose it is furnished with a thick, strong muscle. The hand contains twenty-seven bones.

The muscles are the fleshy parts of the body, in which its strength chiefly consists. They consist of parallel plates of fibers; and their use is to move the bones in all actions, as in walking, or exerting the arms. The tendons are the extremities of the muscles, by which they are made fast to the bones.

It is remarked by anatomists, that the right side, and the *right limbs* of men, are larger than the left; and have the most muscular strength. Hence the right arm is the most used, when one only is necessary. The right arm is used in throwing and in striking, and the right foot is said to step with more firmness than the left. The left limb is generally weaker than the right; and if a person is left-handed, he experiences the inconvenience of it in a thousand ways, even to the turning of a key.

The principal joints of the lower limbs are the knee and the ankle: the one fitted to give the leg its proper motion; and the other, the motions of the foot. We observe, in the foot, the heel is the firm muscular part, for sustaining the chief weight of the body in an upright position, as the thick solid flesh at the first joint of the great toe, is that which aids in walking and leaping. The large tendon of the heel, which is connected with the calf of the leg, is the principal instrument of moving the foot.

But the hand is the limb which more especially distinguishes man from other animals. This is not only admirable in its structure and adaptation to its uses, but it is the hand-maid of reason, the instrument which supplies man with the means of procuring food and raiment, with houses and furniture, with all the varieties of manufactures, and with all the weapons of defense. What the reason invents or contrives, the hand executes.

Many animals are vastly superior to man in size and strength; but man, by his reason and his hands, is able to defend himself from their power, and most of them he can subdue, and render subservient to his wants. In short, the hands are the great instruments by which are executed the works and monuments of arts and sciences. These limbs alone, prove the design of the Creator, to place men at the head of the lower creation. We may well exclaim with the Psalmist, "We are fearfully and wonderfully made!"

There is one law of animal and vegetable natures, which has a prominent bearing on the arguments adduced for proving wisdom and design in creation. This is the self-healing power of living flesh and vegetable substances. What would be the condition of man or beast, if there were no tendency in the parts of flesh, severed by an instrument, or torn by violence, to unite and become sound? How certainly would every child be crippled before he reaches the age of manhood, and this without hope of recovery. A similar law is seen in the vegetable kingdom. A tree stripped of its bark, is, after a due time, invested with a new covering. A wound in flesh, or vegetable substance, is soon healed, and the animal or plant is restored to its wonted vigor. How delightful to the good man is the contemplation of this wonderful provision of creative goodness, for preserving the life, the health, and the comfort of men, from the fatal effects of accidents, to which we are hourly exposed in our necessary occupations.

In the means provided for our subsistence, we see abundant evidence of design. Food is necessary for life and growth; and that no person should neglect to take nutriment, we observe the pain of hunger is given as a stimulus, and the pleasure of satisfying appetite, accompanies the act of feeding. Thus the means of supporting life are inseparably connected with the desire of avoiding pain, and procuring enjoyment.

And that the appetite may never be surfeited, or cloyed, to such a degree as to create a disrelish for food, it is remarkably ordered in providence, that the most common and essential articles of food and drink, are not highly stimulating and inviting to the taste; for such qualities would destroy the powers of taste, or cloy the appetite. It is the moderate sweetness of bread, and other esculent vegetable substances, and animal food, which preserves our relish for them unimpaired through life. And water, the natural drink of man, has no quality inviting to the taste; but our relish for it is created by thirst, when it is wanted. In this manner, the most necessary articles of food never furnish the temptation to luxurious indulgence.

CHAPTER VI.

MORAL SYSTEM.

Its adaptation to the Happiness of Mankind.

If, in the physical world, we discover innumerable evidences of design, wisdom, and benevolence, in the adaptation of created things to the condition of man, no less may we discover, in the moral system, abundant proofs of a like adaptation of the divine laws to the temporal and eternal happiness of the human race.

Men, being the creatures of God, are subject to his moral government. In the character of his subjects, they bear a relation to *him*, and as social beings, they bear various relations to *each other*.

The authority, or sovereignty of God over our race, results from his character as creator; for nothing can be more obvious, than that the being who *makes*, has a right to *govern and direct* to its proper end, what he has made.

The first duty of man, therefore, is the acknowledgment of the supreme authority of God, and an unqualified submission to his commands.

From the perfections of God, as proved both by reason and revelation, we may infer, with certainty, that the ultimate end of all the works of God, is the glory of his character, and the happiness of created beings. If this inference is correct, then from this we may deduce another truth, that all the laws of God, which are intended to operate on intellectual beings, are adapted to promote that end.

The legitimate conclusion from these premises, is, that the happiness of mankind results from their conformity to the divine will, or entire obedience to his laws. If this reasoning is just, the converse of this conclusion must be true, that the disobedience of man to the divine law, is a violation of duty, which disturbs the harmony of the moral system, and tends to the unhappiness of mankind.

In the physical world, we know that all laws are obeyed; that is, they operate at all times and in all places, with infallible certainty. This uniform operation of physical laws is among the most unequivocal evidences of the omnipotence of the Creator. What his power has established, his power sustains with invariable regularity.

But in the moral system, man has an agency. Man is endowed with rational faculties for his own government; but being left to use his own reason, which is an imperfect guide, he often departs from the rules which God has given him, and introduces disorder into society. The great business of human laws, and of educational discipline, is to restrain these wanderings of men from the path of their duty.

For this purpose, the first principle to be established in the human mind, is reverence for the character and laws of God. *The fear of God is the beginning of wisdom.* The reason is obvious; the authority of God is supreme, and that authority must control all the motives and actions of men. It is the only decisive authority; an authority which admits no appeal, and from which there is no escape. It therefore operates upon the minds of men, with an influence far superior to that of human laws. Submission to this authority, then, is the first step toward a conformity to all the laws, human and divine, on which the happiness of man depends. It is therefore the beginning of all wisdom, or true religion.

The character of God, as supreme ruler of the world, demands our supreme reverence, and our cordial and entire obedience to his will. Hence proceeds our duty to worship him; for worship, or external acts of homage, are the means of preserving, in our minds, that fear and reverence and a spirit of obedience. Neglect of worship is inevitably followed by forgetfulness of God, and by consequence, a loss of the reverence for his authority, which prompts to obedience.

Here we see a connected series of causes and effects, admirably adapted to sustain the relation of man to his Creator.

The effect of a due reverence for the Supreme Being upon men, is, to make them feel their dependence on him, and to produce humility. Humility is the distinguishing characteristic of a true christian; and no virtue is more acceptable to God. *God resisteth the proud, but giveth grace to the humble.* In our present condition, with frail bodies, exposed every hour to injury and to death, and with imperfect reason, liable continually to err, and betray us into fatal or pernicious evils, *humility*, and a sense of dependence on the Supreme Being for support and safety, tend to abate pride, and restrain us within the limits of duty.

If the fear of God, a holy reverence for his character and laws, is a duty of such importance, no less is a supreme LOVE to him and his attributes.

And why should we love this great Being? For this plain reason, that he is the *best* of beings. His character comprehends all that is excellent, and of course is the principal object of love among intelligent beings, who are capable of distinguishing between good and evil. *God is love;* and love, among men, is the *fulfilling of the law.* Love is the principal source of other virtues, and of all genuine happiness.

From a supreme love to God, and from a full persuasion of his perfect benevolence and almighty power, springs *confidence;* a trusting in him for protection, for safety, for support, and for final salvation. This confidence in God, springing from love, implying cordial approbation of his character, and obedience to his laws, is *christian faith.* This is the *anchor of the soul, sure and steadfast;* the foundation of the christian's hope. It is this alone which sustains the good man amidst all the storms of life, and enables him to meet adversity, in all its forms, with firmness and tranquility.

With the worship of God, is intimately connected the observance of the Sabbath, as a day of rest and of religious services. There is, perhaps, no single institution in society, that has more important bearings on human happiness, than that of the Sabbath.

The institution and observance of the Sabbath, are unquestionably of divine appointment; and in no divine law or injunction, is the benevolence of the Supreme Being more manifest. The institution combines, in its observance, the most beneficial tendencies to promote the temporal, with the eternal interests of mankind.

For promoting our temporal good, the Sabbath requires men to rest from the common labors of life, to gain fresh strength for renewing them, during the six succeeding days.

For promoting intellectual, moral, and religious improvement, the Sabbath is equally useful. It is the principal time that the laboring classes of men can give to those objects. It enables men to lay aside their worldly occupations and cares, and devote their time and attention to gain a knowledge of their duties to God, and their fellow-men, and to instruct their children in the like duties.

It is found by experience, that the suspension of labor on the Sabbath, is never the cause of want; six days of each week being amply sufficient to furnish us with food and raiment. The devotion of one day in the week, therefore, to our spiritual improvement, is perfectly compatible with our temporal good.

The institution of the Sabbath, then, is among the evidences of design in the Creator, and of the adaptation of his laws to the common good of the human race. Hence we may number the non-observance of this sacred rest, and still more, the desecration of the day by worldly employments, among the greatest sins and most pernicious evils that can afflict society. Wherever we observe a general neglect or violation of the Sabbath, we are sure to find a vicious and degraded state of society.

Among the numerous evidences of benevolent design in the constitution of man, we may rank the gift of *conscience*, that inward watchman, which inspects and guards all our moral actions, and instinctively, so to speak, approves or condemns them. Conscience is a vigilant monitor, that never slumbers; and whenever it is informed what is *right*, and what is *wrong*, it dictates to us that we are to *pursue* the former, and to *shun* the latter. No person can escape from the authority of this arbiter within him. If he does violence to that authority by deviating from duty, he is instantly rebuked by remorse.

On the other hand, a consciousness of obeying the laws of God, and of performing acts of benevolence to our fellow-men, is attended with permanent self-satisfaction and delight. Such facts prove that the conscience is a principle implanted by the Creator in every human breast, as an aid to reason, for the government of our social actions. That all evil affections should produce pain, and self-torment, while all good affections should produce pleasure, is a striking proof that the author of this principle, by implanting it in every human heart, had in view the promotion of personal happiness and public peace.

It is beautifully observed by a British author, that "There is happiness in the very wish to make others happy. There is a heart's ease, a heart's enjoyment, even in the first purposes of kindness, as well as in its subsequent performances. There is a triumphant elevation of spirit, in magnanimity and honor. In perfect harmony with this, there is a placid feeling of serenity and blissful contentment, in gentleness and humility. There is a noble satisfaction in those victories, which, at the bidding of principle, or by the power of self-command, may have been achieved over the propensities of animal nature. There is an elate independence of soul in the consciousness of having nothing to conceal, and nothing to excite shame. By the constitution of our nature, each virtue has its appropriate charm; and virtue, on the whole, is a fund of varied, as well as of perpetual enjoyment, to him who has imbibed its spirit, and is under the guidance of its principles."

It is thus that the pleasure derived from good actions, comes in aid of moral precepts. We are incited by our own happiness to do what conscience dictates, and the laws of God require. In all cases of this kind, our happiness coincides with our duty. And it is thus that man becomes a miniature likeness of his Maker, in whom are inseparably united supreme moral excellence and supreme felicity.

As practice or repetition of actions produces habit, it is of importance to consider the effect of such repetitions in strengthening good principles, and forming the character which social happiness and the laws of morality demand. By every act of true virtue, we gain strength to practice it with more uniformity; as by every repetition of vicious actions, the power of resisting temptation to vice is impaired. It is then by the habit of virtue, and of pious reverence for the author of our being, that our character is to be formed, and assimilated to that of the inhabitants of heaven. It is this character which alone is worthy of heaven, and which alone can relish its enjoyments. It is the character which God enjoins us to form; and evidently the character which is the ultimate end of our creation.

Justice, in our intercourse with our fellow-men, is a duty enjoined by God. And why should we be just? For these obvious reasons: that every individual has certain rights, the enjoyment of which is essential to his welfare. What a man procures by his labor, and what he purchases by his money, the fruit of his labor, is his own property, by natural right; and what he inherits is his *own* by the laws of the land.

If a man can not have an exclusive right in what he earns, and the exclusive enjoyment of it, he will not labor; and if no man would labor, society could not subsist. But if one man could, with impunity, take the fruit of another's labor, the result would be endless contention; society could enjoy no peace, and individuals no protection and safety.

Integrity, or the observance of justice, then, is essential to private and public happiness. It is the fundamental principle in all the numerous concerns of society. Every deviation from justice and rectitude among men, is a violation of the divine commands,—a disturbance of the order which God has enjoined for the security and comfort of every individual of the human family.

Nearly allied to this virtue, is *truth*. Truth is a conformity to facts, or the actual state of things. This virtue is the foundation of all social confidence. Without the observance of truth between man and man, there can be no safe intercourse in society; no security in commercial transactions; no certain rule of conduct in the treatment of our fellow-men.

Deception, a violation or neglect of truth, is one of the meanest of vices. A man never loses sight more effectually of all that constitutes true dignity of character, than when he is guilty of deceiving his fellow-men. Deception is the parent of fraud, and of a thousand injuries to the reputation and property of others. The liar, the deceiver, the dishonest man, is as detestable to men, as he is abominable in the sight of God.

By the establishment of the law of truth, God has provided for the peace of society, and for the security of the rights of persons and property; every man, therefore, who infringes this law, deserves to be an outcast from civilized society.

In no particular, is truth more essential to the happiness of society, than in the protection of the reputation of others. Slander is one of the foulest of vices; and the fruitful source of hatred and contention among men. Defamation, in all its forms, is a hateful vice. In no one respect is the character of a good man, and a good member of the community, more dignified and estimable, than in the most scrupulous care to avoid every thing, in speaking or writing, which can tarnish the good name of his fellow-citizen.

In the exercise of the virtues of mercy, charity, humanity, gratitude; in short, in kindness in every form, we find the effect is, to mitigate the evils, or increase the happiness of our fellow-men. This is the end to be answered; the purpose for which the Creator implanted the benevolent affections in the human heart.

On the other hand, all the malignant passions of men, tend to destroy, not only the happiness of others, but the quiet and peace of mind of those who indulge them. Enmity, anger, revenge, never fail to annoy and disturb those who harbor them. Men, under the influence of these passions, are self-tormenters.

By inflicting evil on others, men inflict it on themselves. No person can inwardly hate another, without suffering pain. On the other hand, the bestowment of charity on others in poverty, the relief of distress, the exercise of humanity, that dissipates sorrow, and lights up a smile of joy in the desponding sufferer, rewards the generous benefactor with pleasure and delight.

It is thus that the laws of our nature are made to coincide with the laws of God's moral government. Every social action which God enjoins, tends directly to increase human happiness. Every action which he forbids, tends to disturb that happiness. In the moral system, therefore, as in the physical world, all the arrangements of divine providence, prove incontestably, that the Creator acted by design, in adapting his laws to the condition of mankind.

The moral laws of God, are as perfect as physical laws; and if men would act in strict conformity to them, society would be in peace and harmony. Every man would be the friend of every other man.

It is the command, and the purpose of the Supreme Being, that men should labor for their subsistence, or be occupied in some business, which is necessary to the wants, or useful to the comfort of themselves, and their families, or to the community. If men will not obey this command; if they are lazy or idle, and remain, or become poor, the fault is their own. Their Maker has provided for them strength and materials, to supply themselves with what they want for support and happiness; and if they neglect to employ them, they have no right to murmur or complain.

The laws of God require men to be temperate in all the enjoyments of life; and temperance in eating and drinking, in labor and pleasure, is useful or necessary to health and comfort. On the other hand, intemperance of every kind, whether in the indulgence of the appetites, or in any excess of exertion, tends to impair health, without which there can be no tolerable enjoyment of temporal good. If, then, men will indulge in excesses, in gluttony and drunkenness, in labor, or over action, and thus enfeeble their bodies, or bring on themselves disease, whom can they blame but themselves?

Sleep is the chief restorer of strength, when exhausted, and essential to the preservation of the vigor of the body, and of the mental powers. If men will toil or revel, when they require rest or sleep, and thus impair their happiness, they must submit to the consequences; the fault is all their own.

Every infringement, or neglect of commutative justice, impairs the rights of some one or more of the community; this injury provokes resentment, and resentment seeks recompense by force, or by law. The result is *enmity* instead of *friendship*, and *quarrels* instead of *peace*. Then why do the men complain? the fault is their own; they violate the order of providence; and they are punished in their own sufferings, for that violation.

The rules of civility and decorum, are among the most essential laws of social intercourse. A violation of these rules, produces anger, or coldness, in mutual intercourse; anger is often violent and unforgiving; one offense is followed by another; men excited, forget that "a soft answer turneth away wrath;" the passions urge the parties to revenge; and the quarrel ends in deadly hate, or loss of life. It is thus that men are purveyors of their own miseries.

If men were as exact in observing the principles of moral duty, and the rules of civility, as they are in keeping their accounts in business, none of these evils would exist to disturb society. And why are they not as punctual in the observance of these moral and social rules, as they are in their secular occupations?

What plausible reason can any man assign for neglecting the moral and social duties, while he is rigidly exact in his pecuniary transactions? Is the difference to be ascribed to the want of proper discipline of the mind in youth? Is it owing to an erroneous calculation of the means of happiness; to ignorance; to wrong views; or to an incurable perversity of nature?

Be the reason what it may, it is man that is his own enemy. He quits the path to happiness, which God has marked out for him; and happiness is not to be found, where the Author of all good has not placed it. It is never found in the by-ways and dark paths of error and wickedness.

In no department of the works of God, is the divine purpose of adapting things to the happiness of mankind, more manifest than in the institution of marriage, and of families. In families is formed individual character; in families originate the principles, and the habits, which give character to society, and to government. For these purposes, the husband is endowed with strength and masculine qualities, to command his household, and to encounter the rougher labors of life. The wife, formed with a more delicate body, and endued with finer sensibilities, is adapted to superintend domestic concerns, and to cherish the kindly affections of her offspring.

In the little circle of the family, commence the strong attachments and sympathies, which, in a thousand ways, contribute to prompt men to aid each other in advancing their prosperity, and in alleviating the burdens and distresses of life. The mutual affection of the parents for each other, restrains the licentious inclinations natural to the human race, and which, if left to ramble uncontrolled, would banish from society the kindlier feelings of our nature. The fidelity of the husband and wife, teaches the value of fidelity in all other relations; fidelity to the friend, to the citizen, and to the state.

But in no respect is the discipline of the family of more importance, than in its relation to government. In the family are formed the elements of civil government; the family discipline is the model of all social order; the patriarch is constituted by God himself, the monarch of his family and tribe; under his parental example and authority, the children are instructed in their duties; the respect for the law and the magistrate begins in the respect for parents, for their injunctions, their authority, and their instruction. Here is subdued, if subdued at all, the refractory will of the child, and here is checked the propensity to vice, which, if unrestrained in youth, might lead him to the penitentiary or the gallows. In the family, obedience becomes habitual; its value is appreciated; and the influence of this habit, and of a just estimation of its importance, is carried into society and civil government.

In the family, are nourished the tender ties of affection, which bind together brethren and sisters, and their descendants to the third and fourth generation. Here are planted the seeds of piety, which grow into an habitual reverence of the Supreme Being, the source of all genuine virtue; and the principles thus planted, may, and often do, descend from parents to children, and to their posterity, to an indefinite period of time.

Families are the nurseries of good and of bad citizens. The parent who neglects to restrain and govern his child, or who, by his example, corrupts him, is the enemy of the community to which he belongs; the parent who instructs his child in good principles, and subjects him to correct discipline, is the guardian angel of his child, and the best benefactor of society

CHAPTER VII.

THE LAWS RESPECTING FEMALES.

Their rights and disabilities, their real estate, dower, &c.

FEMALES and males, under the age of twenty-one, in the language of the law, are denominated *infants*, and in common speech, *minors*.

By the common law, and by statute, males, at the age of fourteen, and females at the age of twelve, are capable of choosing guardians, and by the common law may then consent or disagree to marriage. By statute, both sexes have a capacity to dispose of their personal estate by will, at the age of seventeen; and by the common law, at the same age, a male may be an executor, and a female an executrix. By common law and by statute, at twenty-one, both males and females become of full age, are liberated from parental power, and are free.

By marriage, the husband and wife, (in law language, they are usually called Baron and Feme,) become one person in contemplation of law; the existence of the wife being merged in that of the husband.

The personal property or chattels personal of the wife, and in her possession at the time of the marriage, instantly vest in the husband. He may use and dispose of them without her consent, and give them away by will. If he never disposes of them, they will go to his executors, though she survives him.

As to the real estate of the wife, at the time of the marriage, the husband acquires a right to the use of all the land or real estate of the wife during her life; and if they have a living child, and he survives her, then during his own life, as tenant by the curtesy. But the wife always retains the fee; the husband cannot dispose of it, unless she joins in the deed, and if she does not, upon her death it will descend to her heirs.

The husband does not acquire by the marriage, an absolute title to the choses in action of the wife, such as bonds, bills or notes, or mere rights of action; but he has an absolute right without her consent, to sue for, collect, and reduce them into possession; but if he fails to do so during life, his right is barred by her death, and they will go to her heirs; and if she survives him, and they remain uncollected, they will remain to her absolutely.

The husband acquires the same right to the estate of the wife accruing after marriage, excepting her choses in action, and as they are considered in law as one person, these immediately vest in the husband, and he can recover them in his own name; and if she survives him, they will not go to her, but to his executors, though he has not reduced them to possession.

In respect to contracts made between the husband and wife, prior to their marriage, the general rule is, that all which are to take effect during the coverture, or continuance of marriage, are annulled by the marriage, but all which are to take effect after the dissolution, are valid and binding on the husband.

As the husband has the control of the person and estate of the wife, it is reasonable he should be charged with all her legal liabilities; and he is bound to pay her debts contracted before marriage, though he received no estate by her, and a suit can be maintained against them jointly. But the debt must be collected, or judgment obtained for it in the lifetime of the wife, or if she dies, the husband is exonerated. If the wife survives the husband, she is personally liable for all her debts contracted before her marriage, not collected or secured by judgment against her husband.

The husband is liable for the torts or trespasses of the wife, committed before or after the marriage, if prosecuted against both. In case of his death before judgment, she alone is liable.

If the wife be injured in person or property, she and her husband must join in an action for redress; but she can bring no action without his concurrence, and in his name as well as in her own.

A woman may be punished for crimes committed by her, as if she was single. She may be excused for small offenses in company with him, or by his coercion; but for the higher crimes, his presence or coercion will not excuse her, and she may be indicted and punished separately.

In trials of any sort, they are not, as a general rule, to be allowed to be evidence for or against each other.

From the nature of the marriage connection, it is the duty of the husband to provide for the maintenance of the wife, according to her rank and condition in life. If he fails to do so, she may bind him by contract for necessaries for such maintenance, even without his assent. She can not, for any other purpose, by her own authority, make any contract obligatory on herself or on him. The husband may give her an express power to contract for him, or his assent, express or implied, will authorize her to make contracts binding on him.

It is a well known maxim of the common law, that husband and wife, being but one person in the eye of the law, can not contract with each other during coverture. Yet contracts are sometimes made between them for a separate maintenance of the wife, by the intervention of trustees, which are recognized both in law and equity.

In this state, a married woman is enabled by statute to convey her lands by deeds duly executed by her and her husband jointly; but a deed of the wife's land by the husband alone, is void, as far as it respects the interest of the wife.

Whether a married woman can devise her lands, was a question which has been much agitated in this state; but the legislature have put it at rest, by a statute giving her that power.

Although the husband does, as above stated, acquire a property in all the personal substance of the wife; yet in one particular instance the wife may acquire a property in some of her husband's goods, which shall remain to her after his death, and shall not go to his executors. These are, her necessary apparel, which she shall retain in preference to the claims even of creditors; and other paraphernalia, such as jewels, and ornaments of dress, suitable to her rank, in her possession at his death, in preference of every claim but that of creditors. The husband may, indeed, (if so unkindly inclined,) dispose of such ornaments in his life time—but not by will.

Although the husband, by law, has power and dominion over his wife, as he is responsible for her actions, yet he is bound to exercise it with sound discretion; and if he wantonly abuses her, or threatens to treat her with violence or cruelty, she may swear the peace against him, and cause him to find sureties for his good behavior.

The contract of marriage can be dissolved only by death, or by divorce.

Divorces are of two kinds: 1st, *a vinculo matrimonii*, from the bonds of matrimony; 2d, *a mensa et toro*, or from cohabitation. In England, the first is effected by some canonical cause of impediment, and is rarely granted; the second arises from some supervening cause, which, affecting only the harmony of the marriage state, causes but a partial separation, and not a total dissolution of the bond. Such divorces are there more common.

In Connecticut, the law is reversed, and by statute, divorces from the bonds of matrimony are granted by the superior court, for four causes, viz: for adultery, for three years' willful absence, for seven years' absence of one party, not heard from, and for fraudulent contract. A divorce *a mensa et toro*, is rare, and never granted except by the legislature.

On the divorce from the bonds of matrimony, the rights of the wife to her estate revive in the same manner as if the husband had died. In the case of such divorce for the default of the husband, the court can assign to the wife a reasonable part of his estate, not exceeding a third, whether it is real or personal, to be hers absolutely.

On the dissolution of the marriage by the death of the husband, or by divorce, when she is the innocent party, and no part of the estate of her husband was assigned to her, for her support, the wife shall have dower in one third part of the real estate *of which the husband died possessed*; to be to her during her life, unless a suitable provision was made for her support before marriage, by jointure, or by the last will of the husband, in lieu of dower and to her acceptance. Dower is thus regulated by statute in Connecticut. In England, and in most of the United States, the wife is entitled to dower, by the common law, in all lands the husband *was ever seized of during coverture*, though he had transferred them, unless she was a party to the deed of conveyance. This is not law in Connecticut.

By statute in Connecticut, it is made the duty of the heirs of an estate, within sixty days after the death of the husband, to apply to the court of probate, to have dower assigned to the widow, and the duty of the court to appoint three freeholders to set out the same; and if the heirs neglect, on her complaint, the court will cause it to be done. It is, also, made the duty of the widow to maintain and keep in repair the houses, buildings, fences, and lands assigned and set out to her, for her dower, and to leave the same in good and sufficient repair.

The husband can not by his last will deprive his wife of her dower. If by will he gives property to his wife, expressed to be in lieu of dower, she is at liberty to take or refuse it. If she takes it, she is barred of her dower. If she does not take it, she may resort to her dower, but can not take both.

In addition to dower, thus secured to the wife, she is entitled by the statute of distribution, both in England and generally in the United States, if her husband dies intestate, to one third of his personal estate, which remains after payment of debts, if he left any issue: but if he left no issue, she is entitled to one half of the residuum of the personal estate, after the debts are paid, to be hers forever.

But although the husband could not by will, deprive his wife of her right of dower without her consent; yet by will, he might have increased or lessened her share of his personal estate; and if so disposed, he might even cut her off from the whole, except her paraphernalia.

MINORS, PARENTS, AND GUARDIANS.

All persons, male or female, under the age of twenty-one years, are minors, (in law language styled infants.) Such persons are in a situation very different from adults, both as it respects their contracts, and their liability to be punished for crimes.

The ages of males and females, are different, for different purposes. By the common law, a male at twelve years old may take the oath of allegiance; at fourteen is at years of discretion, and may therefore consent or disagree to marriage, and may choose his guardian; at seventeen may make his testament of his personal estate, and may be an executor, and at twenty-one is at his own disposal, and may aliene his lands, goods, and chattels.

A female, also, at seven, may be betrothed or given in marriage; at nine is entitled to dower; at twelve is at years of maturity, and may consent or disagree to marriage, and if proved of sufficient discretion, may bequeath her personal estate; at fourteen is at years of legal discretion, and may choose a guardian; at seventeen may be executrix; and at twenty-one may dispose of herself and lands; so that full age in male or female, is twenty-one.

By statute in this state, the rules of the common law have been so far altered, that a female of the age of twelve may choose her guardian, and at seventeen may bequeath her personal estate. Whether the rules respecting the early marriage of a female would be sanctioned here as law, has never been tested. Fortunately for society, no case has occurred requiring it.

In criminal cases, an infant of the age of fourteen years, may be capitally punished, for any capital offense; but under the age of seven he can not. The period between the age of seven and fourteen, is subject to much uncertainty: for the infant shall, generally speaking, be judged *prima facie* innocent: yet if he was *doli capax*, and could discern between good and evil, at the time of the offense committed, he may be convicted, and undergo judgment and execution of death, though he has not attained to years of puberty or discretion, whether male or female. Infants have various privileges, and various disabilities; but their very disabilities are privileges; in order to secure them from hurting themselves, by their own imprudent acts.

They are by law placed under the control and watchful care of their parents or guardians.

An infant can not be sued, but under the protection and joining the name of his guardian; but he may sue either by his guardian, or by his next friend, who may be any person who will undertake the infant's cause; and it sometimes happens that an infant may have occasion, by his next friend, to institute a suit in equity against a fraudulent guardian.

As a general rule, infants are not liable for their contracts, either express or implied, and it is the privilege of an infant, that he may rescind his contracts at pleasure. But to this rule there are exceptions. By the common law, an infant is in many cases bound by his or her contract for necessaries. The articles deemed necessaries, are, food, drink, washing, clothing, physic, and instruction; but he is not liable even for these, unless they were necessaries, under his then circumstances, and, also, suitable to his station in life.

Parents are bound to afford maintenance, protection, and education for their children, and whenever a minor lives with a parent, guardian, or master of sufficient ability, and that care and protection is duly exercised; or if the infant lives abroad, and the parent supplies him with necessaries, or the means of procuring them; in either case the infant is not bound by any contract he may make for necessaries, nor is the parent in such cases bound to pay for them. But when the infant is out of the reach of the protecting arm of the parent, guardian, or master, or when that care or protection is not duly exercised, or if the infant has no parent, guardian, or master, he may in either case lawfully contract for necessaries, and will be bound to pay, though a minor.

We are not to suppose that the parent, if there is one, is discharged from his liability, to the person thus furnishing the necessaries for the infant. That is not the case; for as it was his duty to provide for the minor, whenever the minor is provided for, he has received a benefit; and the articles furnished to the minor, in the view of the law, have come to the parent's use; and the law raises a promise from the parent to pay for the necessaries thus furnished. The reason why the infant is made liable, is for the infant's benefit, that he may obtain relief with more readiness, than would often be the case, if no person could be resorted to for compensation, except the parent, who might be at a distance; or the person furnishing the necessaries might have no confidence in him.

The person thus furnishing supplies, may look either to the parent or to the minor for payment, and the minor by pleading his minority, can not avoid his contract: but to bind either, the articles furnished must be necessaries, under his then circumstances, and suitable to his station in life; and they will be bound only to the amount of their value to the minor, and not to the extent of his contract, if beyond the value. Therefore it is, that a minor is not bound by bond or other security for debt, the consideration of which can not be inquired into on trial, for it can not be known, without such inquiry, whether the debt was for suitable necessaries, and at a fair value; nor is he bound by a contract for the loan of money. It is not in itself among the necessaries, and the law will not trust his discretion in laying it out. As a general rule, the infant is not bound by his contract for any article, however desirable it may be to him, if it is not one of those termed by the law, *necessaries*.

Infants have power at common law to make other contracts for their benefit, or where there is a semblance of benefit.

They may purchase lands, or other property, and receive deeds which will be valid. So a bond or note given to them, is binding on the obligor. Such contracts, however, are voidable, as to the infants, but they can not dissent to them when under age; when of age they may dissent to them, or affirm them.

What contracts made by an infant are void, and what merely voidable, has occasioned much discussion. It seems now conceded, that when the court can pronounce the contract to be to the infant's prejudice, it is void, and when to his benefit, as for necessaries, it is good; and when the contract is of an uncertain nature, as to the benefit or prejudice, it is voidable at the election of the infant. A ratification when of age, will make him liable on voidable contracts.

Another privilege of infancy is, that in general an infant shall lose nothing by non-claim, or neglect of demanding his right; nor shall any other *laches* or negligence be imputed to an infant, except in some very particular cases.

Although the age of infants is regarded with lenity, in respect to the commission and punishment of crimes; yet an infant of any age is liable in a civil action, for a tort or trespass committed with force.

Infants during their minority, are under the care and protection of their parents or of guardians. The reciprocal rights and duties subsisting between parents and legitimate children, are, on the part of the parents, from the dictates of nature, that they afford to their children, maintenance, protection, and education. These duties, though founded in the nature of the connection, and enforced by the strongest feelings of the human heart, are, also, enforced in Connecticut, by statute regulations requiring parents and others who may have the care of children, to bring them up to some honest and lawful calling or employment, and to teach them or cause them to be taught to read, and write, and cipher, as far as the four rules of arithmetic. And upon their neglect, whereby the children become rude and unruly, the selectmen, with the advice of a justice of the peace, may take such children from the parents, and bind them out to some proper master, males till twenty-one, and females till eighteen, that they may be properly brought up, and educated.

If a parent neglects to supply his children with necessaries, a third person may do it, and charge the parent with the amount; but these necessaries must be according to their situation in life.

Parents are not bound to provide for their children after they become of full age, in case they are able to provide for themselves.

The duty of protection is enforced by the strongest feelings of the human heart. The parent is the natural guardian of the child; may assist and uphold him in lawsuits, without being guilty of maintenance: he may justify an assault in defense of his child.

The duties of parents to educate their children, are left by our law, generally to their own discretion, requiring only a common school education, for which the public have provided liberal and ample funds.

The higher branches are left to the judgment of parents. It is, however, the duty of all parents and masters, to employ their children and apprentices in labor, or otherwise, so as to prevent their living in idleness; and all children are to be brought up in some honest calling and employment. The power of parents over their children is adapted to enable them to perform their duty, and keep their children in obedience and subjection. The parent may restrain and control the actions of his children, and may, when necessary, correct and chastise them in a reasonable and moderate manner. When these measures prove insufficient, and any child shall continue stubborn and rebellious, and shall refuse to obey the commands and resist the authority of their parents, or those who have the charge of them, our statute provides, that on complaint to two justices, they may try them, and if found guilty, sentence them to the house of correction, or the common jail, for a term not exceeding thirty days, but may, on reformation, release them.

The consent of parents must be obtained by minors to their marriage. If the minor has any estate, the father has no power over it, only as guardian and trustee. He may receive the rents and profits of his land during the minority of the child; but must account for them when the child arrives to full age. The parent is entitled to the services, and the benefit of the labor of the child, during his minority.

The duties of children to parents, are obedience and subjection during their minority; and honor, reverence, and respect, during their lives. As they depend on the assistance and protection of their parents during the defenseless period, of infancy, so when the parents are reduced to a state of infirmity, by old age, it becomes the duty of children to yield them the like assistance and protection. The statute law has, therefore, imposed on them the same obligation to support their parents, as upon parents to support their children, in like circumstances.

We have thus far considered children as the legitimate offspring of their parents, that is, children born within the pale of lawful wedlock. We ought, also, to consider the state of those unfortunate children who are born out of lawful wedlock. Such are illegitimate, and a subsequent marriage of the parents will not make them legitimate.

An illegitimate child, by the common law, has no inheritable blood in his veins; he can inherit from nobody, and nobody can inherit through him; for he is considered as having no relation but his own issue, and his own children only can be his heirs. He can not even inherit from his mother, nor can his mother inherit from him; so total is the defect of inheritable blood.

He may have a name by reputation, and by that name may purchase and hold property, and can transmit the same to his issue, born in lawful wedlock.

Though in legal contemplation, an illegitimate child has no relations, yet his mother is considered as his natural guardian, till another is appointed, and has the custody and control of him, and is bound to educate and maintain him. The putative father has no power or control over him, and the child is not bound to yield him obedience. A statute has prescribed how the reputed father of such a child, shall be ascertained, and how he shall be compelled to assist the mother in the maintenance of such child.

When the mother has a place of settlement in this state, her illegitimate child follows it; but if the mother has no place of settlement in the state, the place of birth is the place of settlement. In Connecticut, it has lately been decided that an illegitimate child is heir to his mother, and such children, of the same mother, are heirs to each other. In many of the United States, the subsequent marriage of the parents will legitimate such children.

OF GUARDIAN AND WARD.

A guardian is one who, by law, has the care of the person, and the management of the estate of an infant whose father is dead, or of one who has no father. In such cases the law has provided for the appointment of guardians, who are to stand in *the place of the parents*, and in a great measure, to exercise the powers, and perform the duties of fathers. Infants under the care of guardians are called *wards*.

In England, the father has by statute, the power of appointing by will, guardians to his infant children. In this state, by statute, the whole power respecting infants, is vested in the courts of probate, and the father can not appoint a testamentary guardian.

It is the duty of courts of probate to appoint guardians for all minors within their districts, who have no father, and are not of age to choose their guardian, and to notify those who have attained that age and do not voluntarily appear, to come before the court and make such choice, and if the judge approves of the person chosen, he may allow him to be the guardian. The age for choosing a guardian, is twelve for females, and fourteen for males.

The court of probate must take bonds of a guardian, for the faithful discharge of his trust, and to render an account of his guardianship to the court, when required, or to the minor when of age.

Where an infant has a father, in general no guardian can be appointed, for the father is the natural guardian of his children, and has the charge of their persons, and the management of their estates; and if a child possesses property independent of his father, the law is, that the father is bound to take care of it, and is accountable for it to the child, in the same manner as a guardian appointed by the court of probate.

The mother is not considered the guardian of her children, unless of nursed children, till the age of seven years; but she may be appointed guardian.

As to the power and duty of guardians, they are considered as standing in the place of the father, and of course the relative powers and duties of guardian and ward in general, correspond with those of parent and child; but there is this prominent distinction, the father is entitled to the service of his child, and is bound to support him; but the guardian is not entitled to the service of his ward, and is not bound to support him out of his own estate. He must provide for the employment and education of the minor, according to his circumstances and condition. He may bind him an apprentice to learn some useful trade, or he may be occupied in useful labor. He should, at least, give him a chance for a common education, and when his wealth, prospects, and talents will warrant it, he will be justified in giving him a more liberal and expensive education.

It is, also, the duty of the guardian to take reasonable and prudent care of the estate of the ward, and manage it in the most advantageous manner.

It is a vital principle that the guardian shall not reap any personal advantage from the use of the ward's money. He ought to put it at interest whenever he can; if he puts it in the public funds, or at private interest, he discharges his duty, and will not be liable for it, unless he is guilty of gross negligence by placing it in unsafe hands.

When the ward arrives to full age, the guardian must account for the rents and profits of the estate, and shall be allowed a reasonable compensation for his expenses and trouble; and must answer all damages arising from his misconduct and neglect.

If a female ward marries, the guardianship is determined, for she has contracted a relation inconsistent with it; and her husband on the marriage becomes her guardian.

MASTER AND SERVANT.

A master is one who, by law, has a right to a personal authority over another; and such person over whom such authority may be rightfully exercised, is a servant.

At common law, this right in a master originates in some compact, made with the servant, or with some person who has a right to command him, and is for a limited time.

Slavery is a species of service not included in this definition.

Servants are of several descriptions.

1st. Menial servants, so called from being *intra mœnia*, or domestics.

2d. Laborers by the day or week, &c., but not living in the family of the employer.

3d. Apprentices, or minors bound to service.

4th. Stewards, factors, and bailifs, though acting in a superior, a ministerial capacity, are however considered in law, as servants *pro tempore*—with regard to such of their acts as affect their employer's property.

By the law of England, if the hiring of a domestic is general, without any particular time limited, the law construes it to be a hiring for a year, and no master can put away his servant, or servant leave his master after being so retained, either before or at the end of his term, without a quarter's warning, unless by mutual consent.

It is not known that this rule has been enforced here, as the parties usually make their contracts for a limited time, or during pleasure, but in such cases reasonable notice would be required.

The power and the mode of binding to service, persons of various descriptions, is regulated both in England and in this country, by statutes embracing, generally, the same objects, but with considerable local variations. The English statute embraces adults under certain circumstances, as well as minors.

By the statute of Connecticut, fathers and guardians of minors may bind them by indenture as apprentices, to learn some trade or profession: males till twenty-one, and females till eighteen, or to the time of their marriage, within that age, with the assent of such minor, expressed in the indenture, by subscribing the same. Minors of the age of fourteen, having no father or guardian, within the state, may bind themselves apprentices, by indenture, with the approbation of the select-men of the town.

The father or guardian, has no authority under this statute, to bind the minor an apprentice, without his assent, But by the statute, the children of poor persons, supported by the town, that are suffered to live in idleness; the children of parents who can not provide for them; and children who have none to take care of them, may be bound apprentices by the civil authority and select-men; males till twenty-one, and females till eighteen, or to the time of their marriage, within that age.

When parents and masters neglect to bring up their children in some honest calling, the select-men and civil authority may take them away, and bind them to other masters; a wise regulation, when judiciously exercised.

Apprentices are usually minors who are bound by their fathers, guardians, or the select-men, by indentures, to some person, for a term of years not exceeding their age of twenty-one, to be maintained and instructed in the art and mystery of their master. In England the law requires a service of seven years to learn a trade, before a person can set up the business; but in this state no time is limited.

The mode of binding apprentices is by an instrument in writing, called an *indenture*, and this instrument must, by the common law, as well as by our statute, be in writing, to give the parties the full benefit of it; for a parol binding to an apprenticeship is void; but in such case, a master might maintain an action against a stranger for enticing such person out of his service, and would be liable for his conduct as a servant, for he would be considered as an apprentice *de facto*, (in fact).

A master can not assign or transfer an apprentice to another, for it is a personal trust. Yet if he continues with the assignee, with the consent of all parties and his own, it is a continuance of the apprenticeship.

When the master dies, the apprentice is discharged, and is not bound to serve the executor; for the binding is to the man, from a personal knowledge of his integrity and ability.

The master is entitled to the faithful service of his apprentice, and to all his earnings. He can maintain an action against any one for beating his servant, by which he lost his service, or for enticing him away, or harboring him. A master may reasonably and moderately correct and chastise his servant, if a minor, for disobedience to his lawful commands, negligence in his business, or for insolent behavior; but for all acts of unnecessary severity and wanton cruelty, he would be liable in damages to the party injured.

Further provision is also made by statute, for the punishment of refractory apprentices, by a summary trial before two justices, on the complaint of the master, and if found guilty, they may sentence him to the house of correction for a term not exceeding thirty days.

By the same statute it is also provided, that it shall be the duty of parents and guardians to inquire into the treatment of the apprentices by their masters, and if they find the masters guilty of personal cruelty or abuse, or that they refuse to provide for them necessary board and clothing; or neglect to instruct them in the trade or business, to learn which they are bound apprentices, they shall make complaint to a justice of the peace, who, if he can not reconcile the parties, may bind the master to appear before the county court, and if the court find the master guilty, they may discharge the apprentice from the service of the master, and cancel the indenture with cost.

If any servant or apprentice, without sufficient cause, shall abscond from the service of his master, he shall, when he arrives at full age, be liable to pay all the damages sustained by his master, or the person entitled to his service. Provision is also made by the same statute, for the instruction of children employed in manufactories, and for their discharge, in case of neglect.

OF THE LIABILITIES OF MASTERS AND OF SERVANTS.

The master is liable for all the contracts of the servant made in the regular course of his employment. But where a third person makes a contract with a servant, knowing it not to be within the scope of his authority or directions, it will not bind the master.

When a master employs a servant to buy or sell goods, or any property, he will be answerable for all his contracts relative to such purchases and sales.

When the master usually employs the servant to buy goods on credit, he (the master) will be answerable for the goods he purchased on credit, though he furnished him with money, and directs him to pay for them.

Where the master has not been in the practice of employing a particular tradesman, it shall not be in the power of a servant, without authority, to employ him and render the master liable. If a man is in the practice of sending a child or servant to a store to buy goods, on credit, without written authority, he will be responsible for the goods taken, though they never come to his use.

OF THE MASTER'S LIABILITY FOR THE TORTS OF A HIRED SERVANT.

In consequence of the contract subsisting between the master and servant for his services, the master is liable for all torts done by the servant in the course of his employment, as well as for negligence and unskillfulness.

The master is equally liable, whether the injury was done by the command of the master, or without it, and whether by negligence or malice.

The liability of the master, has never been questioned, when a servant does an act injurious to another, through negligence, or want of skill, on the principle, that the law requires that the master at his peril, shall employ servants who are skillful and careful.

Innkeepers and common carriers are especially liable for the misconduct of their servants, when other masters, for similar misconduct, would not be liable. If the servant of an innkeeper should steal the goods of his guests, the master is liable; and the case is the same if the servants of the common carrier embezzle the goods intrusted to their master. This is a doctrine founded in policy, for, in these cases guests and those who employ common carriers, are under the necessity of trusting them with their property, without reposing any special confidence in them, for they are strangers to them, and the nature of the business gives them opportunities and temptations for mischief, which the master is bound to guard against.

A servant may commit trespasses and do tortious acts, for which he alone will be responsible. To make the master liable, the act must be done while in his employment, and in the course of his business; but it is not necessary that they should be done by his command or in his presence.

Although masters are thus, generally liable for the wrongs done by their servants, servants are also liable for all torts committed by them, to the party injured; and in cases where an action will lie against the master, it will also lie against the servant. And servants are generally liable to masters for any misconduct, or injury done by them.

NEW YORK.

Marriage is declared by statute, to be a civil contract.

Marriage is forbidden between parents and children, grand parents and grand children, in any degree, and brothers and sisters of the whole or half blood, legitimate or illegitimate.

Marriage may be declared void by courts of competent authority, for want of age or understanding to consent, for physical inability, and for consent procured by force or fraud.

During the life of the parties, a second marriage is void, unless, 1st. The first marriage has been annulled by court, for other cause than the adultery of the party who marries again. 2d. Unless one party has been sentenced to imprisonment for life, and a pardon does not restore marital or parental rights. 3d. Or in case of absence for five successive years, if the remaining party does not know or has not reason to believe that the absent party is alive, a second marriage will be good and legal, until declared void by a court of competent authority, and if thus declared void, (as for example, by the return of a former husband,) the children are legitimate.

A court of chancery may declare a marriage void, for six reasons.

1st. Want of age and understanding to give consent; but a party who is of age can not apply, nor either party, if they have cohabited after proper age.

2d. A former husband or wife living, and the marriage still in force.

3d. One party a lunatic or an idiot.

4th. Consent obtained by force or fraud.

5th. Physical inability.

6th. Adultery.

Divorces *a mensa et toro*, from bed and board, for life or a shorter period, may be decreed by chancery; for cruel and inhuman treatment, and for conduct which renders further cohabitation unsafe and improper; also for abandonment, and neglect to provide support.

In these cases, the court have full power to regulate the custody of children; and division of property or maintenance,

PERSONAL PROPERTY.

The husband, as at common law, is entitled to administer his wife's personal property, but further than can be done by common law principles: his personal representatives, in case of his death after his wife, have the same right, and the assets in his or their hands, are liable to her debts contracted, when sole. The wife's rights to her personal property, remain as at common law.

REAL ESTATE.

A feme covert, or married woman, can not aliene her real estate by fine and recovery, as at common law. She may convey all her legal and equitable interest in real estate, by joining in a conveyance with her husband. If she resides in this state, she must make an acknowledgment, on a private examination, apart from her husband, that she executes the conveyance freely, and without any fear or compulsion of her husband.

A married woman may execute a power, during her marriage, by grant or devise, without the concurrence of her husband, unless prohibited by its terms. But she must acknowledge it separate and apart from her husband. If authorized to convey in fee, she may grant a less estate.

A general and beneficial power may be given to a married woman, to dispose of lands conveyed or devised to her in fee, without the concurrence of her husband. And a special and beneficial power may be granted to her in like manner, to dispose of any estate less than fee.

DOWER.

The wife is endowed, as at common law, of all real estate belonging to the husband, during coverture, at any time. By statute, a married woman who is an alien, if an inhabitant of this state, at the time of her husband's death, is entitled to her dower; and by statute, also, a married woman is endowed of any inheritable interest of her husband, legal or equitable. But she has no dower in lands mortgaged to her husband, until his estate, by foreclosure or sale, becomes absolute.

Dower can only be forfeited by divorce from the bonds of matrimony. A jointure may be accepted, in the place of dower, before marriage, or a legacy or gift after the death of her husband, at her option.

A married woman can not devise real estate by will.

PENNSYLVANIA.

The right of dower, at common law, remains in Pennsylvania, save that in case of intestacy, the statute gives to the widow one third part of the real estate, for the term of her life, and one third part of the personal estate absolutely, if the intestate leaves issue; and if the intestate leaves no issue, then the widow has one half of the real estate for life, and one half of the personal estate, absolutely. This allotment to the widow, is in lieu and full satisfaction of her dower at common law.

If the husband devises or bequeaths estate to his wife, which, by the will or operation of law, is a bar to the dower, she may be compelled, by process of law, to make her election. If a wife joins in a conveyance of real estate, with her husband, and acknowledges the deed, with separate examination, according to the provisions of an act of Assembly, it will bar her of dower, in the land conveyed.

Since the first day of October, 1833, a married woman may, under a power legally created for the purpose, dispose of her real or personal estate by will. And a married woman may, with the consent or license of her husband, dispose of her personal estate by will.

CHAPTER VIII.

PROPERTY.

Various Species Explained.

PROPERTY, is the ownership of land or goods, or it is the thing owned.

Ownership, consists in the entire and exclusive right of possession and use of the thing. An owner is called the *proprietor.*

Property differs from *possession. Possession,* is the holding or occupancy of a thing; but the *possessor* is not always the *proprietor.*

A *title* to property, is the legal right to possess it, or that by which the ownership is vested in a person.

Property is chiefly of two kinds, *real* and *personal.*

Real property or estate, is *land*, and whatever is fixed or attached to it, as buildings, trees, minerals, water, rocks, &c.

Personal property consists of money, or movable goods of any kind, as the furniture of a family, cattle, instruments of arts or agriculture, ships and the like.

The holding of real estate, or the manner of holding it, is called *tenure;* and the possessor or occupier of land entailed or under a lease, &c., is called the *tenant.*

The tenure of most lands in the United States, is that of *fee-simple. Fee-simple* or *fee*, is the entire property in real estate, free from any charge of rent or services to a superior. It is an estate of inheritance.

Inheritance, is the receiving, and possessing of real estate, by descent from a deceased ancestor or relative. This estate is cast upon the heir, by act of law.

Heirs, are the children of deceased owners of real estate, or their children and representatives; or in defect of children, other relations may be *heirs.*

The two principal modes of acquiring estates, are by *descent or purchase. Purchase,* in this country, generally signifies acquisition by bargain and sale. Acquisition by descent is *inheritance.*

The owners of real estate may bequeath their property to whom they please, by will.

A *will* or *testament* is a writing duly executed according to forms prescribed by law, and by a person of a sound mind, by which he directs the disposition of his estate after his death.

The person who makes his will, is called the *testator.*

The gift of real estate by will, is called a *devise;* the person who gives, is called the *devisor;* and the person to whom the gift is made, is called the *devisee.*

A gift of personal estate by will, is called a *legacy,* and the person to whom the gift is made, is called the *legatee.*

The person who is appointed by *will,* to settle and manage the estate of a deceased person, is called an *executor,* or if a female, an *executrix.*

When an owner of estate dies without leaving a will, he is said to die *intestate,* and his estate is called *intestate.*

When no will is left by a deceased person, the court of probate, or other proper court appoints a person to settle the estate, that is, to collect and pay debts, and distribute the property. This person is called an *administrator;* and if a female, an *administratrix.*

If any one of the heirs of the owner of real estate, dies before the testator or ancestor, his children take his share of the property by representation, or heirs of the deceased heir.

Estates in fee, or held by lease for life, are denominated *freehold,* or *freehold estates.*

Assets, in a legal sense, are the money, goods, or other estate of a deceased person, which are subject to the payment of his debts and legacies. The word signifies also the effects of an insolvent debtor.

A *conditional* fee, is an estate limited to a particular heir, or to certain heirs specified. This is called an estate in *tail,* or an entailed estate, by which the other heirs are *cut off,* (Fr. *tailler*) from the inheritance. In England, most lands are entailed to the eldest son; in the United States, there are few estates of this kind.

Estates may be held by mortgage or dead pledge; as when the owner is indebted to another person, and grants to his creditor his estate in fee, on condition that if the mortgager shall pay the debt at a certain day, then the mortgager may re-enter upon the estate. But it is usual in such cases for the mortgagee to re-convey the estate to the mortgager.

An estate in *remainder*, is one limited to take effect and be enjoyed after another estate is determined. If a man grants an estate to A in fee for ten years, and after that term to B and his heirs forever, then A is tenant for years, and B has the *remainder* in fee.

An estate in *reversion*, is the residue of an estate left in the grantor, to commence after the determination of a particular estate granted by him. Thus a man grants an estate for life, for years, or at will; and when that estate ceases, the estate returns to the grantor, who is said to have the *reversion* of the estate.

An estate in *joint-tenancy*, is that which is granted to two or more persons, to be held in fee-simple, fee-tail, for life, for years, and at will. This estate is created by the parties, and not by act of law; and the survivor of the joint-tenants takes the whole estate. This right is called the right of *survivorship*.

An estate in *coparcenery*, is when lands of inheritance descend from an ancestor to two or more persons. These are coheirs, coparceners or parceners.

Estates in *common*, are such as are held by *unity* of possession, and by *distinct* titles. The owners are called *tenants in common*.

The person who grants an estate, is called the *grantor*; the person to whom an estate is granted, is called the *grantee*.

A *lease*, is a conveyance of lands or tenements, for life, for years, or at will, usually in consideration of rent.

The person who makes the lease, is called the *lessor*; the person to whom it is made, the *lessee*.

Rent, is the *rendering*, *return* or recompense given for the use of the land or tenements.

Tenement, in law, is a term that comprehends lands, buildings, offices, rents, commons, and in general, whatever may be *held*, provided it is of a permanent nature.

Hereditament has a more comprehensive signification, for it includes whatever may be inherited, corporeal, incorporeal, real, personal, or mixed.

Chattels, is a term which signifies goods, movables, personal estate, and also interests growing out of real estates or ıxed to them as ward-ships, terms of estates for years, the t of presenting a parson to a church, and the like. Hence tels are *real* or *personal*; but in the United States, the l generally means *personal* estate.

roperty in movables, is *absolute* or *qualified*. Absolute erty is that which a man possesses in full and exclusive :. Such is property in domestic animals, horses, cat- &c.

ualified property, is that which a man may have in wild ts, which he reclaims and keeps in possession, as deer, s, rabbits, doves, or other fowls, and fishes in ponds. A has property in such animals while they are in his pos- ion; but if they escape, and manifest no disposition to n, the property ceases.

man has property in a swarm of bees which he hives, or :h he can bring to his hive; but if they fly into the wil- ess, the property ceases.

man may have a qualified property in air or light; for if as a window by which he has customarily enjoyed light, ıs a right to it, and no man can lawfully obstruct his en- ent of it. So also a man may have a qualified property stream of water for his mill, and a ship on the ocean has ılified temporary property in the water which it occupies.

ower, is that part of the lands and tenements of a deceased and, which a widow enjoys during her life.

inture, is a settlement of lands or tenements, upon a wo- in consideration of marriage; it is made to her before iage, to be enjoyed after the death of her husband.

ıw is a rule of action prescribed by the supreme power state, for regulating the social actions of the citizens. s determine the social rights and duties of all the mem- of a state or community.

ıw consists in commands and prohibitions. It commands equires the citizens to do what the supreme power has :ribed, as right or expedient; and it forbids what the same ır has determined to be wrong or inexpedient.

ıws are of two kinds, *statutes* and *common law*.

atutes are laws enacted by the legislature or supreme ɪr. These are called *written laws*.

mmon law consists of the principles of justice, as estab- d by long usage, and evidenced by the decision of the ɔst tribunals. These are called *unwritten laws*.

Municipal laws, are the regulations enacted by corporations, as by cities, incorporated towns, and boroughs. Incorporated companies, also, have regulations called *by-laws*.

Civil laws, as opposed to *criminal*, are the laws which respect the private rights and duties of citizens. *Criminal laws* are such as prohibit crimes against the public, and prescribe the penalties for violating them.

Ecclesiastical laws, are the laws of a church; called also *Canon laws*.

Military laws, are such as are made to govern armies, or the militia.

Naval laws, or regulations, are made for the government of national ships, or ships of war.

Moral laws, are the laws which prescribe rules for the government of men in society. These laws prescribe whatever is right, and forbid whatever is wrong, in all the relations of men to God, and to each other. A summary of these laws is found in the Ten Commandments, framed and enjoined by God himself.

Physical laws, are the permanent powers which govern the material world. Such are the laws of growth in animals and vegetables; the laws of respiration and circulation in animals; the laws of gravitation, and of motion in the solar system; and the laws of crystallization in minerals.

Prescription, is immemorial usage, and the foundation of a claim or right to a thing, by virtue of such usage. When a right has been enjoyed time out of mind, the law presumes it to have had a legitimate origin, and such right is held as valid, as if granted by a known law.

An *imprescriptible* right, is one which cannot be interrupted, or destroyed by *prescription*. For example, the use of air is an *imprescriptible* right; the free use of the ocean for navigation, is the *imprescriptible* right of all nations. No nation can claim to have had the exclusive enjoyment of air, or of the open sea, from time immemorial.

A *contract*, is an agreement between parties, which binds each to do or forbear some act. In this case, each party acquires a right to what the other promises. Or, a contract is a mutual promise, upon good cause, and lawful consideration, which binds the parties. The words *bargain*, and *covenant*, express the same thing. A *compact* has a like meaning, but this word is generally used for an agreement between states or public bodies.

These words all imply a mutual promise. A *promise*, is a verbal or written declaration, made by one person to another, by which the person who makes it, binds himself in honor, conscience, or law, to do, or forbear, some act specified. This declaration gives to another the right to a performance, on the part of him who makes it.

The person who promises, is called in law, the *promiser*, and the person to whom it is made, the *promisee.*

If one person *promises* to visit his neighbor at a certain time, he is bound in honor, or by courtesy, to fulfil his promise, but there is no law to compel him to fulfil it.

A promise in *law*, is made for a good or valuable consideration, in the nature of a covenant, by which the promiser binds himself (and it may be, his legal representatives,) to do, or forbear, some act, and this gives the promisee a right to demand, and compel a fulfilment.

The *consideration* in a promise, is that on account of which the promise is made, or the condition which is considered the compensation, or equivalent for what is promised. Thus, when a man promises to pay another for a day's work, the *work* is the *consideration.*

A promise may be *absolute*, or *conditional.* It is *absolute*, when something is promised to be given, or done at all events, or when the performance depends on no condition. It is *conditional*, when something is to be done, or to take place, in order to make it binding.

A promise may be *express*, or *implied.* It is *express*, when it is declared in words, or in writing. It is *implied*, when, without express words, justice and reason require something to be done by one person, in consequence of something that has been done, or given by another. If I hire a man to work for me a day, or a week, or a year, without promising to pay him, justice requires that I should pay him; and the law presumes a promise on my part to give him a reasonable reward. This is an *implied* promise.

An unlawful promise is not valid or binding.

A *debt*, is something that is due and owing from one person to another. Debts are of various kinds.

Debt by bond, is that which is created by a writing under the hand and seal of a person. In bonds there is a condition inserted, upon the performance of which, the bond becomes void. If the condition is not performed, then the bond is obligatory.

Debt is also created by a *bill* or *note*, which contains a promise, that for value received, the promiser will pay a sum of money at, or before, a certain time. This note is signed by the promiser, but is without his seal.

It is essential to a good note of this sort, that it should contain the words, *value received*, or some words equivalent; for these words show that a consideration has been given, on which the promise is founded.

Notes, or single bills, as the English call them, are usually drawn payable to *order*, that is, to the person to whom the note is given, or to any person to whom he shall direct it to be paid.

This direction, or order, is written on the back of the note, and is called an *indorsement*. This may direct the money to be paid to a particular person by name; or it may be an order in *blank*, that is, to any person to whom the holder of the note shall assign it, who is called the *assignee*.

A note thus endorsed, is said to be *assigned*, that is, transferred to another; and any assignee may, by indorsing his name on the note, assign it to another, and so on to others. The money is to be paid to the holder of the note, the last assignee.

A debt may be created also by any special agreement, or by rent reserved on a lease.

The neglect to pay any debt, at the time specified for payment, subjects the debtor to a suit at law.

When one person hires another to do work of any kind, and does not make an agreement with him respecting the price, he is bound to give him what the labor is worth; that is, a reasonable compensation. If the parties cannot agree respecting the price, the creditor may bring an action in a proper court, to oblige him to pay what is reasonable. The value of the work then, must be ascertained and determined by the court, or by a jury, or by referees, indifferent persons, to whom the court may *refer* the question.

If persons have a controversy respecting their claims, or rights, they often submit the question for decision, to *arbitrators*, who are persons chosen for this purpose by the parties themselves. Generally, each party chooses one person, and the two chosen, appoint a third, who is called the *umpire.*

When one person receives, or comes into possession of the money of another, without a consideration, the law presumes upon a promise in the receiver to restore the money to the owner; that is, it presumes the receiver has it in possession for the use of the owner only; and if the receiver unjustly detains it, an action may be brought against him for a breach of the promise.

When one person expends money for another, at his request, the law implies a promise of repayment.

When an account between persons is stated, and a balance is found to be against one of the parties, the other may have an action to recover that balance.

The suit, in all these cases, is called an action of *assumpsit,* that is, an assuming or promise. (He assumed.)

When a person has found the goods of another, and refuses to deliver them to the owner, on demand, or converts them to his own use, he is liable to answer in damages to the owner.

In all cases, when one person does an injury to another, either by attacking his person, or impairing the value of his property, the wrong-doer is liable to make good the damage.

When goods are delivered to a common carrier, porter, or cartman, to be conveyed to a distant place, if he fails to deliver them safely, he is liable to answer in damages to the owner, unless he can prove the loss to have been inevitable, or without his fault.

But if money or goods are delivered for conveyance, to one who is not a common carrier, and who expects no compensation for the service, such person, in case of the loss of the money or goods, is not, in ordinary cases, liable to make good the loss.

A *chose in action,* is property which may be demanded from a debtor, and recovered by a suit at law; as money due on a bond or note, and any recompense for damage done.

CHAPTER IX.

OF GOVERNMENT, LAWS, CRIMES, TRESPASSES, AND COURTS OF JUSTICE.

A REPUBLICAN government is one in which the right and power of governing, proceed from the citizens to be governed. As great communities can not meet, deliberate, and enact laws, the citizens elect representatives to act for them in making and executing laws.

A constitution of government is the fundamental statute or charter framed by the representatives of the citizens, chosen for that purpose, and assembled in convention; and generally, such constitutions in this country have been ratified by the citizens, in cities, towns, or other local districts.

The constitution determines the manner in which the powers of the government shall be exercised; what officers shall be appointed or chosen; the manner in which they shall be elected; and what powers each shall exercise.

In the American constitutions, the legislature, which is the body to enact laws, consists of two houses, or branches; a senate, or council, and a house of representatives; the assent of both of which is necessary to make a law.

The supreme power of executing the laws is vested in an officer, usually denominated *governor*. The power of holding courts and determining controversies between citizens, is vested in judges. These three departments of the government are denominated the *legislative*, *executive*, and *judiciary*.

This is the most legitimate form of government; and if well administered, it is a far better form of government than a monarchy, in which laws, or decrees are made by one man. Republican government is the best, while the citizens are honest, uncorrupt, and influenced in the choice of their rulers solely by a regard to the public good. If the citizens become corrupt, fall into violent parties, and each party is influenced by a regard to its own benefit, a republican government loses the spirit of freedom, or true liberty, and becomes tyrannical. A party or faction in a republic, is often as despotic as a monarch or emperor.

By natural, moral, and social principles, every man in a community has an equal right to the protection of his person, his property, and his freedom. He has an equal right to seek property in a lawful way, and to enjoy it, whether he has more or less. If men, successful in business, and becoming rich, can not be secure in the enjoyment of their wealth, no man will have a motive to be active and industrious. One man will not labor, if another is to have the fruits of his industry.

Hence the poor have no right to complain, if they do not succeed in business. They all enjoy the same rights; and if they continue in poverty, it is usually for want of industry, or judgment in the management of their affairs, or for want of prudence and economy in preserving what they earn. They have no more right to invade the property of the rich, than the rich have to invade the rights of the poor.

Government is restraint. The design of government is to restrain men from crimes and injuries to their fellow-men. It is proper that the powers of government should impose equal restraint on every person in the community. This is the object of law, and of courts of justice. The laws operate upon all citizens, subjecting them to the same rules of justice; and courts decide causes between citizens, for the purpose of redressing wrongs, and doing equal justice.

Hence the great advantages which men enjoy in civilized and christian countries. Among roving tribes of savages, there are no laws and no courts of justice; every man being left to redress his own wrong. This is the reason why savages take revenge, or satisfaction for injuries, into their own hands. If one man kills another, some relation or friend of the deceased, pursues the murderer, and kills him if he can.

But among civilized men, no man is permitted to avenge his own wrong; and for the best of reasons, which is, that a man can not be an impartial judge in his own cause. Every man is selfish, and apt to view his own side of the question with too much favor. Hence impartial justice is to be expected only from men who have no interest in the cause to be decided.

The highest civil crime that can be committed, is *treason*. Treason is the act of betraying one's country, as by delivering it to an enemy, or by taking arms against it, or by assisting an enemy with arms, provisions, or other means of conquering it. This is a higher crime than murder, because it endangers a whole state or community.

Treason involves the guilt of violating allegiance. Allegiance is the obligation of a subject to the king, or to the state of which he is a citizen. This obligation requires every subject to be faithful to the government, to support and defend it when in danger. And it makes no difference whether a man has taken an oath to be faithful to the government or not. Every person in the state comes under this obligation at his birth, or by taking his residence permanently in the state or kingdom.

The crime next to treason, in hainousness, is *murder*. Murder is the killing of a person maliciously, and with premeditated purpose. Deliberate intention, or forethought, is essential to constitute murder. In most states and countries, murder is punished by the death of the criminal.

Manslaughter, is the unlawful killing of a person, without malice prepense, or premeditated. This may be *voluntary*, that is, done by design, but in a sudden passion; or it may be *involuntary*, when a person is doing some unlawful act.

Excusable homicide, is the killing of a person by misadventure, or accident; as if a man is using an ax, and the head flies off and kills a person.

Justifiable homicide, is when an officer executes a criminal, in pursuance of law and sentence of death. So also a man is justifiable in killing a thief, or robber, who attempts to take his life; and in defending himself, and his wife, or child, when such killing is necessary to save one's own life, or the chastity of his wife or daughter. But these latter cases may be called more properly *excusable homicide*.

Parricide, is the malicious killing of a parent, either father or mother. This murder is of a more atrocious kind than that of killing a person not related; as it implies a more deep malignity of heart, and is a violation of the strongest laws of filial obedience and affection. In like manner, *fratricide*, or the malicious killing of a brother, is a most aggravated species of murder. The same may be said of *sororicide*, or the malicious killing of a sister.

Suicide, is self-murder, the putting an end to one's own life by design. This crime is sometimes committed by persons of sound mind; but often by persons not of sound mind, or in the full possession of reason.

Mahem, is the crime of violently depriving a person of one of his limbs, which is necessary to defend himself; as of an arm, a leg, a finger, an eye. This word is usually contracted into *maim*.

Arson, is the malicious burning of a house or out-house of another man, and it may be by burning one's own house, if by such burning another man's house is burnt. In general, arson is the willful burning of a building by which life is endangered. But what burning of buildings shall constitute *arson*, is determined by statutes in different states.

Burglary, is nocturnal house-breaking; a breaking into a house in the night, with intent to commit a felony, as theft, or other like crime. It must be in the night, for if it is light enough to discern a man's face, such breaking is not burglary. But moonlight does not alter the nature of the offense.

Larceny, or theft, is a felonious taking and carrying away of the personal goods of another. In this crime there is not only a *taking* of the goods, but a taking with the *intent to steal*, that is, to deprive the owner of his property privately, and wrongfully.

Robbery, a species of larceny, is a felonious and forcible taking from the body or person of another, goods or money of any value, by violence, and putting him in fear.

Forgery, is the making, altering, or knowingly publishing or circulating, any deed, bond, will, or other similar paper, which is false; or the making or altering any coin, bill of credit, bank bill or note, and uttering or passing it, knowing it to be false or counterfeit. This is a high crime, as it defrauds individuals, injures credit, and undermines all confidence in social dealings.

All malicious mischief, by which the public or community is injured or annoyed, is also criminal and punishable. All these are public wrongs, or offenses, for which the perpetrator may be indicted by a grand-jury, tried and punished.

Wrongs done to individuals, for which the offender is liable to pay damages, are very numerous. Among these is *trespass* of many kinds. Thus if one man enters upon the land of another without leave, he is a trespasser. In strictness, a person can not walk over another's field without trespassing; but if he does no injury, it is overlooked.

If a man enters without permission into another man's field, and cuts down a tree, however small, he is a trespasser.

If a man or boy enters another's garden or orchard without license, and takes fruit, he is a trespasser, and is liable to pay damages, however small may be the amount.

If one man assaults another, and strikes him, he is a wrong-doer, and may be fined and punished. A bare lifting of the hand against another, in anger and with threatening, is an *assault*; and if the assailant strikes him, or only lays his hand on him, it is a *battery*.

If one man *breaks another's cloſe*, that is, if he breaks the fence, or pulls down bars, or opens a gate, so that the owner is exposed to injury, he is a trespasser, and liable to pay damages, even though no injury is actually done.

Every man's house is his castle, which no other person has a right to enter without permission. In like manner, a man's inclosed fields are his own exclusive property, which no other man has a right to enter, without the owner's consent. The laws are intended to secure to every man the peaceable enjoyment of his possessions; for without such security, every man would be scrambling for the property of others; some persons would be wronged or ruined, and society would be in endless confusion.

In like manner, the laws forbid any person to assault or injure the body of another; and any injury to the person of his wife or children, is a violation of law and morality, for which the offender subjects himself to punishment.

In no respect are men so liable to injure others, as in withholding from them their dues. The neglect to fulfill contracts, is one of the most common vices in society. In some cases, unexpected events render such fulfillment impracticable; but in most cases, the failure is wholly owing to the want of strict principles of honesty, or of improvidence and negligence in the debtor.

In making contracts and promises of payment, a great fault is, that the promiser engages to do what there is no rational prospect he will be able to do. No man should promise payment, unless upon a moral certainty that he will have the means. To make promises without such moral certainty, is a common error, injurious to the promisee, and the source of a multitude of law-suits, or other evils, both to creditor and debtor.

It is also important to the rights of persons, that the borrower of money or of utensils, should be punctual in returning them. This is a moral duty very shamefully neglected. And the mischief of the case is, that many people seem not to feel the obligation of such punctuality. If they have any sense of duty in the case, it is too feeble to influence their conduct. In borrowing tools, or instruments of any kind, and in not returning them seasonably, or in returning them in a broken or impaired condition, there is great immorality; and the more aggravated, as it manifests ingratitude for the favors of the lender.

The law of kindness is a law of morality, and is among the most essential rules by which the peace and harmony of society are preserved. It is the duty of every man, so to use his own rights, and so to conduct his own affairs, as not to annoy or injure his neighbor. Every man should take every opportunity to do good to his neighbor, and avoid doing him the least injury. When these rules are observed, peace and good-will prevail, and add greatly to the happiness of social intercourse.

One of the most common and afflicting evils of society, is slander. "The tongue is a fire, a world of iniquity," says the apostle James. Not only the barefaced falsehood, but tattling, the telling of idle stories, misrepresentations of facts, exaggerations of trifling hasty speeches, are common, and beyond measure mischievous. Who is the man or woman, that, in this respect, is innocent? Who can number the jealousies, evil thoughts, hard speeches, feuds and dissensions between families, which spring from this mean and detestable vice of tattling? One of the first and most important duties in the education and discipline of children, is to repress the disposition to slander.

Another source of great evil to individuals, is, the neglect to reduce agreements to writing. Verbal promises and declarations are soon forgotten, in the whole or in part; or one party may deny what the other alledges to be true; and then follows dissension or dissatisfaction. If the agreement is of much importance, it not unfrequently happens, that a difference of opinion may end in a law-suit. Contracts and agreements, intended to convey rights, should be committed to writing in such precise terms, as to admit of no misunderstanding. The parties should know, the one what he is to *give* or *do*, and the other what he is to *receive*.

Every owner of property has the right to dispose of it, not only during his life, but he has the right to direct how it shall be disposed of at his death. It has sometimes been denied, that a man has a right to dispose of his property by will; but if a man's property were left without an owner at his death, and all persons had an equal right to seize it, the scramble for it would produce quarrels, and perhaps bloodshed; the strongest man, or party, would seize the whole; and the contest would produce every species of disorder.

It has been suggested, that one man can not bind his heirs or executors to pay his bonds and notes, or fulfill his obligations. But if this doctrine were admitted, it would destroy all credit, and put an end to the most important transactions in a community. If death were to destroy the obligation of a note, bond or covenant, who would take a note or bond? Nothing could be more mischievous than the admission of such a doctrine.

In like manner it has been affirmed, that one generation can not bind a succeeding one, nor one legislature bind a future one. It has been said, that when the majority of a generation is dead, the authority which made an act is extinct, and a new majority is not bound by the acts of that which no longer exists.

This doctrine is false and mischievous; and it is founded on ignorance or mistake. The truth is, a nation or state is a corporation that never dies. It is always one and the same body. A succession of members composing it, makes no difference in its powers or rights. Its acts, resolves, and obligations, are always the acts of the same body, and therefore are valid and binding to any extent of time. There is no distinction of generation in a state, or other aggregate corporation.

The laws of descent, or inheritance, are different in different countries. In most countries of Europe, the land, or whole real estate of an owner, descends to his eldest son. This is the provision made to keep great estates entire, for supporting an order of nobles. But it is a law that does great injustice to the younger children. In the United States, every owner of property may dispose of it by will; but if he does not, his estate is distributed according to the laws of the state in which he lives; and in most cases, his property is divided equally among his heirs. This is in conformity to republican principles.

In our American governments, the powers are distributed into three departments,—the *legislative*, the *executive*, and the *judicial*. The *legislature* is composed of persons elected by the people to *make* laws; the *executive* authority is vested in a *governor*, or *chief magistrate*, whose duty is to see the laws *executed*; the *judiciary* consists of judges appointed by the legislature, or by the executive, and their duty is to decide causes or controversies which arise between the citizens.

The judges constitute courts, with different powers assigned to them by the laws. The lowest court is usually a single judge, as a justice of the peace, mayor of a city, or other magistrate. The powers of this judge are prescribed by the laws, and are usually confined to the trial of causes in which the demand is small. In many cases, if one party is dissatisfied with the judgment of this court, he may appeal to a higher court, and have the cause tried a second time. The jurisdiction of this court is usually confined to the town or city in which the judge resides.

The next higher court is, in most of our governments, the county court, whose jurisdiction extends over a county. This court has powers of a more extensive kind, than those of a justice of the peace. They can try causes in which the demand is much greater, than in cases which can be tried by a justice. These powers are defined or specified in the laws. But if either party is dissatisfied with their judgment, then the laws permit the party, when his demand is sufficient, to appeal to a still higher court, for a second trial. This is the superior, or supreme court.

The superior, or supreme court, has power or jurisdiction which extends to the whole state. Their judgments are final or conclusive in most cases; but in some states, causes may be carried from this court, by writ of error, to a still higher court. This highest court is differently constituted in different states. The judges of the superior or supreme court, in some states, hold circuit courts; that is, one judge holds a court in each county, and writs of error may carry causes from this court, to a court held by all the judges.

The higher courts have jurisdiction both *civil* and *criminal*. The *civil* jurisdiction gives the right to try causes of complaint and injury between individuals; such causes as arise on contracts, notes, debts of all kinds, trespass and the like. The *criminal jurisdiction* extends to the trial of crimes committed in violation of law; as murder, manslaughter, arson, theft, robbery, burglary, forgery, and the like.

The trial of crimes, in all cases, and in civil causes, in most cases, is by a jury of freeholders. In the case of criminals, the case of an accused person is first tried by a grand-jury, usually consisting of twenty-four freeholders. An officer, called the attorney-general, or solicitor, or state's attorney, is employed to prosecute the accused, in the name of the state. He presents the charges against him to the grand-jury, in a writing, called an *indictment*; the grand-jury examine witnesses, and if they think the charges supported, they return the indictment, indorsed *a true bill.* If not, they return it, indorsed *ignoramus*, (we are ignorant,) that is, we judge the charges not supported. The prisoner is then discharged.

If the grand-jury find a true bill, the accused person is committed to prison, unless bailed, and awaits a trial before a court, where the trial is by a petty-jury of twelve freeholders. These trials by different juries, give the accused all the advantage possible, of a fair hearing and impartial judgment. The judgment or decision of this jury, is called a *verdict*, which signifies a *true declaration*, or *decision.* If an accused person is found guilty, the judge pronounces sentence of condemnation, and he is punished according to law.

The principal ministerial officer in a county, is the sherif, who has charge of the prison, and of all prisoners in the county, and executes the law upon offenders. He has also the power of serving writs and processes of all kinds, and to keep the peace, by arresting offenders, bringing them before a magistrate for examination, and committing them to prison. The officer of the United States, whose powers correspond to those of the sherif under the state government, is called a *marshal*, and his powers extend to the whole state. He executes process under the courts of the United States only.

Subordinate ministerial officers, are deputy-sherifs, constables, or bailifs. These also have the power of serving writs, summons, and executions, and of keeping the peace. Constables are, in some states, annually chosen by the people, in their town-meetings.

One of the most important provisions of our government, is that the judges of the highest courts *hold their offices during good behavior;* that is, while they perform their duties with integrity, they cannot be removed from their office. The reason is, that if they are chosen or appointed annually, the fear of losing their office may bias their judgment, and they may not be impartial. But if they are not dependent on popular favor, they will be inclined to judge according to law, whether their decisions are popular or not. Experience proves that we can not always depend on a faithful execution of the laws, when executive officers are liable to lose their office at the end of every year. It has been found in Great Britain, as in this country, that the highest court of law is the firmest barrier to defend the rights of citizens, against the usurpations of the other branches of government, and the violence of parties.

CHAPTER X.

RULES OF LOGIC.

Logic is the art of thinking and reasoning, by which new propositions are deduced from such as are known and established, or admitted to be true; or in other words, the art of deducing just inferences from premises.

Logic comprehends the science, or history of the human mind. By logic, we trace our knowledge from the first and most simple conceptions, through their various combinations, and the deductions which result from comparing them one with another.

Perception, is the effect of impressions made on the senses by an external object; or the notice which the mind takes of such an object. Perception, then, results from sensation. We gain a knowledge of the smoothness or roughness of an object by perception.

Conception, is the mental act by which a notion is formed of an absent object of perception. The result of this act is what is denominated an *idea*, which, according to its etymology, is *mental vision*, or what the mind sees. In general, an *idea* is what the mind thinks.

Judgment, is the act or process of comparing ideas, to find their agreement or disagreement, or of examining the relations between one proposition and another. Or,

Judgment, is the decision of the mind, resulting from the comparison and examination above mentioned.

Reasoning, is the process, or operation of the mind, by which new, or unknown propositions are deduced, from such as are known or admitted. Thus, 1. Whatever is forbidden by the divine law, is sin. 2. Drunkenness is forbidden by the divine law. 3. Therefore drunkenness is sin.

Here the two former propositions are considered as true propositions, and these are called the *premises;* these being admitted, the inference is a third proposition, which must be true; and this is the consequence, or the new truth deduced from those before established.

The instruments used in expressing and communicating ideas, are *words*, which are sounds or written characters. Words are *sounds* when addressed to the ear, but *visible characters* when addressed to the eye.

Words, by consent among men, are the signs of ideas; and in order that they may be the instruments of communicating the ideas of one person to another, both persons must understand them to mean the same thing. Thus, when two men, using the same language, are conversing together, if one utters the word *hand*, the other understands him; but if one is an American, or an Englishman, and the other does not understand their language, the utterance of the word *hand* is not understood by the other, and of course, no idea is communicated. If the other person is a Frenchman, the first person mentioned must express the word *main*, and then the Frenchman will know the meaning; *main*, in one language, exciting the same idea as *hand* in the other.

If words are written, or engraved, the characters must be understood to stand for certain sounds, or as representatives of words and ideas. Now, by this means, ideas may be communicated from one person to another, at any distance, on paper, or other material, which contains the characters or words; and thus also, ideas may be, and are, communicated from one generation to another.

Ideas are simple and complex. Simple ideas are expressed by such words as *heat*, *cold*, *color*, *sweet*, *sour*, *whiteness*. These words, and the ideas they express, can not be defined.

Ideas, according to Locke, are derived from *sensation*, or *reflection*. If a person has never felt *heat*, it is beyond the power of words to make him understand the word; he can have no just idea of it except by *sensation*. If a man has been blind from his birth, no words can give him an idea of *color*. Sensation furnishes the ideas received from external objects, and in this perception the mind is passive.

Reflection is the operation of the mind on the ideas it has before gained. This operation furnishes the understanding with new ideas, which can not be derived from the senses.

Complex ideas may be defined, as they consist of combinations of simple ideas. Such are the ideas of a square, a triangle, gratitude, beauty, theft. A square is a figure of four equal sides and equal angles; and before we can define it, we must understand the words *figure*, *four*, *equal*, *side*, and *angle*.

Definition is such an expression of the several ideas involved in a word, as to communicate them to a person who does not understand the word; or the unfolding of some conception of the mind, answering to the word, or term, which is the sign of that conception.

Definitions, to be useful, must excite in the mind the precise ideas which common usage has annexed to the word. If they do not, they mislead the inquirer. In definition, then, the original ideas from which a complex idea is formed, must all be enumerated, and in the proper order. But although this precision is necessary to a perfect definition, yet in practice, definitions may often be shortened by the use of complex ideas, instead of the simple ideas which form them; as the complex ideas are well understood to contain simple ideas.

All the ideas we receive from the objects of nature, represent distinct individuals. Certain individuals, when compared, are found to resemble each other in some particulars. Hence, by uniting the particulars in one conception, we form the notion of a *species*. This idea excludes the peculiarities of the individuals, and retains only the properties *common* to them all.

Again, by comparing several species together, we observe the several particulars in which they resemble each other: then leaving out what is peculiar to each, and retaining only the particulars in which they *agree*, we form the idea of a *genus*.

Thus, in the animal world, all animals that have four legs, constitute a *genus*; as all agree in this particular, they are called *quadrupeds*. But animals that resemble each other in this particular, differ from each other in other particulars. Certain animals that are rapacious, or carnivorous, differ from the bovine species, in regard to their teeth, and modes of subsistence, but they resemble each other in these particulars. These, therefore, form a *species*, called *Felis*, or the Feline species.

The word *animal*, comprehends all organized bodies, which have life and the power of spontaneous motion. By the mode of collecting the particulars in which they agree, and *separating those* in which they differ, they are distributed into classes, orders, genera, and species. When, therefore, we define, or describe a certain animal, we first call him by his generic name; for example, a lion is a *quadruped*. This term includes many simple ideas, but these being understood, it is not necessary to repeat the particulars. If we proceed further, we may state to what species he belongs; and this term, *felis*, comprehends a number of particulars, which are also understood.

Intuitive ideas are such as are discoverable by the bare inspection of the mind, or by simply attending to the ideas contained in a proposition. Thus, the proposition that the *whole* is greater than any of its *parts*, is an intuitive judgment, too obvious to require proof. This is one source of our knowledge.

The foundations of human knowledge are *intuition*, *experience*, and *testimony*. By *experience*, we learn the existence of objects around us, which operate on our senses. By the *testimony* of others, we learn things which have not come under our own observation, and things past, which we can learn in no other way.

Intuition is the foundation of that species of reasoning which is called *demonstration*. Whatever is deduced from intuitive perceptions, by a connected series of proof, is said to be *demonstrated*, and this produces certainty in the mind. The knowledge thus obtained is properly *science*.

By *experience* we obtain a knowledge of the existence and qualities of bodies. We see the sun, moon, and stars; the hills, and trees, and rocks. We feel heat and cold; we learn that ivory is white, that steel is hard, that gold is yellow, that gun-powder, touched by a spark of fire, explodes with tremendous force; that air is elastic, and steam one of the most powerful agents in nature.

By *testimony* we have information of facts not within our sphere of observation. But information from this source is not always correct; and this knowledge, therefore, is not always certain, or agreeable to the truth. Knowledge of past events, derived from testimony, is *historical*.

A *proposition* is a sentence expressing some judgment of the mind, by which two or more ideas are affirmed to agree or disagree. Propositions are affirmative or negative. The idea of which we affirm or deny, and the term expressing that idea, is called the *subject* of the proposition. The idea affirmed or denied, and the term answering to it, is called the *predicate*.

Thus, in this proposition, *the sun is bright*, *sun* is the subject which we affirm to be bright; *bright* is the *predicate*, for that is what is affirmed as belonging to the sun. Here the subject and the predicate, are connected by *is*, the verb, which is called the *copula*. The words connected with a subject, are also called its *adjuncts;* as, the sun, *in all its glory*, rose and illuminated the earth. Here the words, *in all its glory*, are *adjuncts* of the sun.

In negative propositions, a word expressing negation is used, as, dueling is *not* lawful.

But in many cases, a single word includes the whole proposition, as, he *writes*. This includes the subject, the predicate, and the copula; for it is equivalent to the proposition, *he is writing*.

The copula, in a proposition, *unites* the subject and the predicate; a word of negation *separates* them; this word, then, affects the copula, and destroys the union; as when we say, the sky is *not* clear.

But in this proposition, "the man who does *not* sin is approved by God;" the negation does not affect the copula, but it is a part of the subject, describing the character of the man, and therefore the proposition is still affirmative.

Propositions are *universal*, or *particular*. Universal propositions extend to all the particulars of which any thing is affirmed, or denied. Thus, *fowls are winged, or flying animals*, is a universal proposition, comprehending the whole class.

A *particular* proposition has a general term for its subject, but with some mark of limitation, denoting that the predicate agrees only with a part of the individuals included in the general term, as, *some men are prudent*.

Propositions are *absolute*, or *conditional*. An absolute proposition, is when something is affirmed which is inseparable from the idea of the subject; as when we affirm that *virtue contributes to happiness*. A conditional proposition, is that in which the predicate is not necessarily connected with the subject, but only upon some consideration distinct from that idea; as, "*the mind, if not disturbed by guilt, is tranquil.*"

A *compound* proposition is *copulative* or *disjunctive*. A *copulative* proposition, is one in which the subjects and predicates may be severally affirmed or denied of each other; as, *riches* *and honors multiply our desires.* That is, riches multiply our desires: honors multiply our desires. The following is the negative form of this proposition: *neither riches nor honors satisfy our desires.*

A *disjunctive* compound proposition, is when comparing several predicates with the same subject, we affirm that one belongs to it, but which of them is not determined; as, *the world had a Creator, or it is self-existent. The sun revolves round the earth, or the earth round the sun.* If one of these affirmations is admitted, the other fails, of course.

A *self-evident* proposition is one in which the mind immediately perceives the agreement, or disagreement of ideas, so as to require no proof; as when we say, *it is impossible for a person to be in two places at the same time.* Self-evident propositions furnish the first principles of reasoning.

Demonstrable propositions are such as require to be proved by reasoning.

Nothing contributes more effectually to the certainty of human knowledge, than clear and determinate ideas, and a strict adherence to them in all our reasonings.

A *speculative* proposition is one which affirms or denies some property of an idea, that constitutes the subject of our judgment: as, *the radii of the same circle are all equal to one another.*

A *practical* proposition is one which maintains that something may be done: as, *a right line may be drawn from one point to another.*

An *axiom* is a self-evident speculative truth: as, *the whole is greater than a part.*

A self-evident practical proposition is called a *postulate.* A demonstrable speculative proposition is called a *theorem.* A demonstrable practical proposition is called a *problem.* A *corollary* is an inference from a preceding proposition.

Reasoning is the manner of determining the relation between any two ideas, by means of a third, with which they may be compared. Let it be inquired, then, whether men are accountable for their actions. As the connection between *man* and *accountableness,* is not obvious, nor in all cases necessary, we are to find a third idea, which shall enable us to trace the connection. We then consider that to render man accountable, he must possess reason, and freedom of action, or free agency. He must possess reason, or he would not be able to distinguish right from wrong, and he must be a free agent, for no man can be responsible for what he does by constraint. Here, then, we have the principles of determining this question, and the reasoning will stand thus: Every creature possessed of reason and free agency, is accountable for his actions.

Man is a creature possessed of reason and free agency.

Therefore man is accountable for his actions.

This form of reasoning is called a *syllogism*. The two former propositions are called the *premises*, as they precede the third. The terms expressing the two ideas whose relations we are seeking, are *man* and *accountableness*. These are called the *extremes*, and the intermediate idea, by which the relation between them is traced, viz: *a creature possessed of reason and free agency*, is called the *middle term*. The third proposition is called the *conclusion*, in which the extremes, *man* and *accountableness*, are united. The first extreme is called the *major* proposition; the second is the *minor* proposition, and from them are deduced the *conclusion*.

Reasoning, then, is the act or process of the mind, in deducing some unknown proposition from previous ones, which are known or evident. The premises must be known, evident, or admitted to be true, or they must be proved, before the conclusion will be just or satisfactory to the mind. In many cases, a series of syllogisms may be necessary to conduct the mind to an undeniable truth.

It will be seen, that in order to reason correctly, we are to rank things under the universal ideas to which they belong; and then to ascribe to them their several properties or attributes. Thus, when we affirm murder to be punishable with death, and a person is accused of murder, in order to determine whether the person is punishable or not, we must examine the nature of his crime, to find whether it falls under the true definition of murder. We are then to compare the act of which he is accused, with the legal description of murder, and see that it comes within that description.

Thus, in all moral actions, we are to find a standard of right; and in determining whether a particular action is right or wrong, we are to compare it with that standard. It is a general truth, that virtuous actions deserve praise; then to discover whether a particular act deserves praise, we are first *to compare it* with a rule, or standard, to determine whether

rtuous. If it is found to be virtuous, then the conclu-
r inference, is, that it deserves praise. These consid-
s enter into all our reasonings on moral subjects, wheth-
aim to deduce abstract truth from propositions, or to
ine the character of persons.

ry virtuous action is honorable and praiseworthy.
eficence is a virtuous action.
refore beneficence is honorable and praiseworthy.

ry vice partakes of meanness as well as of wicked-

amation is a vice.
refore defamation partakes of meanness as well as of
dness.

ry violation of law is dishonorable.
nbling is a violation of law.
refore gambling is dishonorable.

yllogism may be conditional, as when the major is a
ional proposition. Thus:

od is the sovereign Ruler of the world, he ought to be
d.
God is the sovereign Ruler of the world.
refore he ought to be obeyed.

this syllogism the major is a conditional proposition,
ting of an *antecedent,* (If God is the sovereign Ruler of
rld,) and a *consequent,* (he ought to be obeyed.)

the minor admits the antecedent; and of course the
sion must admit the consequent. That is, the fact be-
mitted that God is the sovereign Ruler of the world, it
s that he ought to be obeyed.

isjunctive syllogism is one in which, of several predi-
we affirm that one necessarily belongs to the subject, to
clusion of the rest, as in the following:

s globe revolves about the sun, or about the moon, or it
ionary.
it does not revolve about the moon, nor is it stationary.
refore it revolves about the sun.

e are three predicates in the major proposition; *about*
, *about the moon,* and *stationary.* The minor rejects the
st, and the consequence is, the conclusion establishes
st, the revolution about the sun.

foregoing syllogisms are complete, consisting of three
itions. But in many cases, the minor proposition is so-

obvious, that it need not be specified, and the syllogism will consist of two propositions, the major and the conclusion. Thus:

Every man is mortal.

Therefore every king is mortal.

The minor proposition, *every king is a man*, is here omitted, as being too obvious to require to be mentioned. This seemingly imperfect syllogism is called an *enthymeme*.

In like manner, the major proposition may be omitted. Thus:

We are dependent beings.

Therefore we should be humble.

Here the major proposition (all dependent beings should be humble,) is omitted.

Another form of reasoning is called a *sorites*, in which a number of propositions are so connected in succession, that the predicate of one becomes the subject of that which follows, until at last a conclusion is formed, by bringing together the subject of the *first* proposition, and the predicate of the *last*. Thus:

God is omnipotent.

An omnipotent being can do every thing possible.

He that can do every thing possible, can do whatever does not involve a contradiction.

Therefore God can do whatever does not involve a contradiction.

Here God, the subject of the major proposition, is brought into connection with the predicate of the last.

The last species of syllogism to be noticed, is the *dilemma*. This is an argument by which we endeavor to prove the absurdity, or falsehood of an assertion. In this syllogism, the major is a conditional proposition, whose consequent contains all the suppositions upon which the antecedent can take place. These suppositions are to be removed by the minor, and this removes that of the antecedent. Thus:

If God did not create the world perfect in its kind, it must have been from the want of inclination, or the want of power.

But it could not have been either from want of inclination, or want of power.

Therefore he created the world perfect in its kind. Or, the conclusion may be, it is absurd to say, that he did not create the world perfect in its kind.

CHAPTER XI.

RHETORIC, COMPOSITION, STYLE.

The word *rhetoric* from the Greek, and the word *oratory* from the Latin, have the same meaning; they signify the art of speaking well upon a subject in order to persuade. Rhetoric is an art comprised in certain rules, which are adapted to render speaking successful in accomplishing its purposes.

The *first* thing to be observed by an orator, is to speak with truth and propriety; the *second*, is to adopt due method in the arrangement of his arguments; the *third*, is the embellishment of his subject with the beauties of language; and the *fourth*, is a degree of copiousness which shall fully express what is best suited to his purpose.

Writers on oratory comprise the art in four divisions; *Invention*, *Disposition*, *Elocution* and *Pronunciation.*

Invention is the discovery of such arguments as are adapted to prove or illustrate the subject; to conciliate the favor and engage the passions of an audience.

An argument is that which presents reasons to convince the mind and induce belief, of what was before disbelieved or doubted. Thus, if the purpose of a speaker is to prove temperance to be beneficial to men, the proper mode is to show its good effects on health and economy; for if it promotes these, it is a personal benefit, as all men will admit that health and economy are beneficial. Or we may prove the same point by contrasting the effects of temperance with those of intemperance, and showing that intemperance impairs health and wastes property, which are evil effects.

In all cases of reasoning, we are to proceed on known facts, or on principles which are admitted or undeniable, such as the laws of nature; mathematical principles; or on events which are known; or we are to proceed on probabilities, in which case the strength of arguments, and their tendency to convince, will depend on the strength of the evidence; or we are to proceed on testimony, which is the declaration of witnesses. In the latter case, we are to consider the number and character of the witnesses, the nature of their testimony, and the various circumstances which may increase or lessen their credibility.

In reasoning on the established laws of nature, as in mathematics, if the process is correct the result is certain. But in reasoning on probabilities or human testimony, we may be deceived or misled, and by this means, we may arrive at a wrong conclusion. Hence it sometimes happens that men addicted to mathematical reasoning, are apt to be led to false conclusions, when they reason on interest, motives, and passions of men, or on the ordinary occurrences of life.

In all our reasonings, it is important to have clear ideas of the subject, and to use words of definite significations. All ambiguous words, which are such as admit of two or more senses, should be carefully avoided. In every step of reasoning, the statements should be clear and precise, and every point fully established.

Disposition is the manner of arranging the materials of a discourse. This should be so methodical, that every part should succeed that on which it depends for support; or, it should be the order in which arguments follow each other, in a train of reasoning.

Cicero, the great Roman orator, arranges the parts of an oration in the following order: *Introduction*, *Narration*, *Proposition*, *Confirmation*, *Confutation*, and *Conclusion*.

The *introduction* is designed to prepare the minds of hearers, for a suitable reception of the parts which are to follow. In this part of a discourse, it is important to gain the favorable opinion of the hearers. This may be done by the orator's modestly representing himself as impartial, or not interested in the success of his cause; or by expressions of high respect for the judges or hearers, manifesting his confidence in the correctness of their decision.

The introduction to a discourse should also give some general account of the subject of the discourse. A general view of the subject proposed, and of its design, enables the hearer the better to connect and understand the several parts, as they succeed each other.

Narration is the recital of something done, in the order and manner in which it was done; such as the cause, manner, time, place, and consequences of an action or event, with the character and circumstances of the persons concerned. This part of a discourse is often necessary, to render it more intelligible to the hearers. The narrator should be as brief as the questions contained in the discourse will admit; whatever is necessary to elucidate the subject should be stated; but all matter foreign to the subject should be omitted. All the statements should be perspicuous, probable, and as entertaining as the subject will admit.

The *proposition* of a regular discourse, is a clear, distinct statement of the subject, and the main points to be proved. In this part of an oration or discourse, it is often necessary to divide the subject into distinct heads; each of which is to be separately considered. This division often assists the hearer to understand and recollect the several points stated, and the arguments applicable to each.

Confirmation is that part of a discourse, which furnishes proof, authority, and support to a cause. This includes the arguments, the evidence, and the reasoning, which are intended to sustain the cause. In this part, the reasoning may often be conducted by syllogisms. (See *Logic.*) Thus, to demonstrate that the world is under the direction of a wise governor, we may reason thus: Things which are directed by wisdom are better governed than those which are not. Nothing can be better governed than the solar system. Hence we infer, that the solar system is under the direction of a wise governor. This is the *synthetic* mode of reasoning.

The *analytic* method of reasoning is different. In this the speaker proceeds step by step, till he brings his hearers to the intended conclusion. Thus, for example, to prove the being of a God, or intelligent author of all things, he may reason thus: Every thing we see in the world had a beginning; whatever had a beginning must have had a prior cause, for it is clear that no effect exists without a cause; hence we infer that the world and all that we see of creation, must have had a supreme cause. From the order and harmony of the universe, we further infer that the supreme cause is an intelligent and wise Being, as order cannot proceed from accident or ignorance.

Instead of a complete syllogism, orators often use an *enthymeme*, which is an imperfect syllogism; consisting of two parts, one of the premises of a complete syllogism, and the conclusion.

Example. "Our duty requires that we should love what is most excellent."

"Therefore, duty requires that we should love God." Here the second, or minor proposition, is omitted, as being too obvious to need recital. It would read thus: "God is most excellent." Therefore it is our duty to love him.

Confutation is the disproving of the reasoning of an opposite party. This is done by arguments and reasoning, as in the other cases, or by contradiction. *Contradiction*, however, cannot avail, unless when facts are too obvious to be denied. Sometimes an adversary may be confuted, by directing his own reasoning against himself; sometimes by turning against him what he has admitted; sometimes by finding and presenting to view, a defect in reasoning. In some cases, an orator may admit an adversary's argument, but deny its validity or its application to the question.

The *conclusion* of a discourse may consist of two parts; *recapitulation*, and an *address* to the passions of the hearers. *Recapitulation* is a summary statement of all the material arguments in a discourse, intended to refresh the memory, and by bringing them into a narrow compass, present them in a stronger light. Such a summary, well conducted, has often a very impressive effect. In addressing the passions, the orator must direct his efforts to excite such feelings as will operate in favor of his arguments.

The conclusion of Mr. Ames's speech in Congress, on the British Treaty, affords a fine example of an address to the sympathy of his hearers. He was in feeble health, and after a most brilliant display of eloquence, he closed with the following words: "I have, perhaps, as little personal interest in the event as any one here. There is, I believe, no member who will not think his chance to be a witness of the consequences, greater than mine. If, however, the vote should pass to reject the treaty, and a spirit should rise, as it will, with the public disorders, to make confusion worse confounded, even I, slender and almost broken as my hold upon life is, may outlive the government and constitution of my country."

TROPES AND FIGURES.

The word *trope*, from the Greek, signifies literally a turning, *or change*. In rhetoric it is a figure in words, or a change of a word from its proper signification to some other, for the purpose of giving it more beauty or strength in description. A trope consists in a single word. A *figure* is a change which respects a whole sentence. It is the language suggested by the imagination or the passions, and intended to be more emphatical and beautiful, than the usual mode of expressing the same sense.

Tropes are of different kinds. One sort of trope is taken from things internally related, as when a part is taken for the whole, or a whole for a part. Another trope is taken from things externally related, as cause and effect, subject and adjunct. Another is taken from the similitude of things, and a fourth sort from the contrariety of things. The first of these is called *synecdoche;* the second *metonymy;* the third *metaphor;* the fourth *irony.*

Synecdoche is a trope by which the whole of a thing is put for a part, or a part for the whole. In this trope the two things are related, and the word used retains its proper sense. Thus *genus* is used for *species;* as when Christ directs his disciples to preach the gospel to *every creature;* that is, to every *rational creature.*

Species may also be used for *genus;* as when we say a man gets his *bread* by labor; in which use, *bread* is put for *food* in general. So *money* is used for *wealth.* When we say *wine* destroys more than the *sword, wine* is used for intoxicating liquors in general, and the *sword* for armies or war.

When we say, in this grave lies such a *person,* we mean his *corpse* or *body.* When Mary Magdalene says, "They have taken away my Lord;" she means his *body.* In like manner, the word *souls* is often used for *persons.* So *silver* and *gold* are often used for money in general. So farmers use the word *head* for the whole animal; as *twenty head* of oxen, or cattle, using *head* for *heads.*

In like manner, the Romans used the words, *whole world,* for *their empire;* and Luke writes that there went out a decree from Cesar Agustus, that *all the world* should be taxed; meaning the whole *Roman empire.* When we say we take shelter under a man's *roof,* we mean in his *house.* We also use a definite number for an indefinite one; as when we say, we have seen such a thing a *hundred times,* meaning a great number of times.

A *metaphor* is a trope which changes words from their proper signification to a different one, by reason of some similitude between them. Thus a *cunning* man is called a *fox*, from the supposed artfulness of the fox. A similitude differs from a metaphor only in this: that in a similitude there is a comparison expressed between two things; but in a metaphor a single word is used, instead of a comparison. When we say, a man is as *bold as a lion*, we use *similitude;* but when we say, a *man is a lion*, we use a *metaphor*. A metaphor then is a similitude in a single word.

When we say, a man stands at the *helm* in a state, we mean that he is in a station to direct the government; as a man at the *helm* of a ship directs its course. In like manner, we speak metaphorically when we use *see* for *understand*, from the resemblance of the sense of *seeing* to the act of the mind in perceiving ideas.

Under this head it may be observed, that as all moral or abstract ideas are expressed by words derived from physical action, or physical objects, or properties, they are primarily all *metaphorical*. Thus the word *right*, in a physical sense, signifies *straight;* and from the supposed similitude between *straightness* and proper moral conduct, this word is used to express what is just and good. Opposed to this is *wrong*, from the verb to *wring* or *twist*, which implies a *perversion* of *right*, a deviation from a straight line. So *equity* is that which is *equal*, *even*, or *smooth*, which implies *straightness;* and *iniquity* is a deviation from such *equality* or *straightness*.

Thus, also, the act of *seeing* is sometimes expressed by *holding*, as in *behold;* that is, the *having as in sight*, or *in the eye;* and *knowing* and *understanding* are expressed by words which express physical action, as in the word *comprehend*, which denotes a taking-in or holding the whole compass; and *understand*, a *standing under*, denotes the *holding*, or *sustaining* an idea in the mind.

In like manner, a course of moral conduct is represented by *walking*. "Enoch *walked* with God." So *carriage*, *conduct*, and *deportment*, are all words originally expressing physical action. So *heat* and *warmth* are applied to the temper and passions; as are *coldness*, and *gravity*, or *weight*.

In like manner, *deliberation* is expressed by *weighing*, or the movements of a balance in weighing. So *consider* is from *sitting with* a subject; and *assiduous* is *sitting to*, or *close* to any business.

In many instances, words expressing moral and abstract ideas have been so long used, as detached from physical action or properties, that they are not generally considered as *metaphorical.* Thus *virtue*, in morals, is used without any reference to its primary sense, which is *strength*, *energy*, or *vigor*, being from the same root as the Latin *vireo*, to grow, which implies *action;* and when it is used for the quality of a plant, perhaps few or no persons connect the word with physical action or property. So *love, hatred, joy, sorrow*, are words used without any reference to their primary physical sense, or objects, which are wholly unknown to men in general.

Light is a metaphor for *knowledge; darkness* for *ignorance*, or *gloomy prospects.*

The finest and strongest metaphors are those which give life and action to inanimate things. Such metaphors introduce new forms and images to the sight, which render ideas most striking. Thus Cicero, speaking of the death of the vile profligate wretch, Clodius, says, "The very *altars* of the gods seemed to exult at his death." So when the Pharisees requested Christ to rebuke his disciples for their expressions of joy at his arrival at the mount of Olives, he replied, "If these should hold their peace, the stones would immediately cry out."

It is in this use of the metaphor, that an *iron heart* may be used either for *courage* or *cruelty;* and a *dove* may represent *innocence* or *fear.* The *eagle* is the representative of bold, daring flight, and hence of great strength or enterprise.

A *metonymy* is the putting of one word for another; the change of names of things naturally united, but so that one is not of the essence of the other. Thus *Mars*, the deity of war, is used for *war: Ceres*, the supposed inventress of corn, for *corn.* In the declaration, "He drank the flowing bowl," *bowl* is used for the liquors it contained.

When a word signifying the *cause* is used for the *effect*, it is a *metonymy;* as when a *sword* is used for *slaughter.* So *hand* is used for *power;* the *eye* for *inspection;* a *crown*, or a *scepter*, for royal authority. So Christ, in the parable of the rich man, says, "They have *Moses* and the *prophets*," meaning their *writings;* and we constantly use the name of authors for their writings; as, *Homer* for the Iliad, and *Milton* for *Paradise Lost.*

Irony is a trope in which one contrary is signified by another.

In this trope the meaning of the words is not changed; but by a peculiar manner of utterance, the words are understood to have a meaning contrary to what is expressed. Thus, when an *intemperate* man is said, with a grave or arch look, to be a man of *very temperate habits*, it is understood, that the speaker means to represent him as *intemperate*. There are some remarkable instances of the use of irony in the scriptures. There is a fine example of it in 1 Kings xviii. 27, where Elijah calls on the priests of Baal to prove the reality of their deity.

Solomon uses the like mode of speech, when he exposes the follies of youth, in the eleventh chapter of Ecclesiastes; "Rejoice, O young man, in thy youth, and let thy heart cheer thee in the days of thy youth, and walk in the ways of thy heart, and in the sight of thy eyes; but know thou that for all these things, God will bring thee into judgment." Here the former part of the address is ironical, but the latter part is not.

There are certain tropes which are called *secondary*, which are so called, because they may be referred to some of the other tropes.

Autonomasy is when a word of a *common* signification is used for a *particular* thing or person. Thus we say, " John is gone to the *city*, meaning New York. So we say, the *orator*, for *Demosthenes* or *Cicero;* and the *Apostle*, for St. Paul. We call a very *strong* man, *Samson;* a very *wise* man, *Solomon;* and a very *patient* man, *Job.* These forms of speech come under the *synecdoche*, in which the whole is used for a part, or a part for the whole.

Communication is when, to avoid envy and prevent the imputation of pride in taking praise to ourselves, or to compliment others, we join others with ourselves in praising or blaming actions. Thus, when we would remind another of a fault, we say, *we* have done this or that, instead of *you* have done it; or *they* have done this or that.

Litote is a mode of speech in which, by denying the contrary, more is intended than the words express. Thus when one says, I can *not commend* you for that action, he may mean to *discommend* the person. This mode of speaking is used for the sake of modesty, or to soften an expression which might otherwise give offense. In like manner, when we say, Cicero was no *mean orator*, we intend to have it understood that he was a very *distinguished orator*.

Euphemism is a word, or expression, intended to soften and render agreeable, or less displeasing, what, in plain direct language, would be offensive. This is often necessary, or convenient, in communicating indelicate ideas. It is supposed that the disagreeableness of the word *death*, gave rise to the use of *departed this life*, and *deceased*. In the use of euphemisms, we are to adapt language to the taste and refinement of the age, or of the company to which it is addressed. In former ages certain words gave no offense, which in this age are intolerable.

Catachresis is a harsh trope, usually a metaphor. It is mostly used by poets for the sake of novelty, or to give force to an expression. Thus in describing Raphael's descent from heaven, Milton says, he

> "Sails between worlds and worlds;"

where the novelty of the word *sails*, gives more life and force to the description than the word *flies* would have done.

Hyperbole is the boldest of all tropes, for it exceeds the limits of truth, and represents things greater or less, better or worse, than they are. But the representation is made in such a manner as not to deceive and mislead the reader or hearer. Thus we say of a very lofty thing, it *reaches to the skies*. The spies sent to explore the land of Canaan, reported that the cities were great and *walled up to heaven*. This is *auxesis*, or exaggeration. But when we say, a lean man is a *mere skeleton*, we exceed the truth in diminution. Saul and Jonathan are said to have been *swifter than eagles, and stronger than lions*.

Metalepsis is when two or more tropes of different kinds are contained in one word. Thus, when Julius *Cesar* was a young man, Sylla remarked of him, "In one Cesar there are many *Mariuses*." Here it is represented, that Cesar would be like Marius, ambitious and turbulent, and that his ambition would produce evils to the state, like those which the ambitious Marius had produced.

Allegory is a series or continuation of tropes in one or more sentences. Thus Samson's riddle is an *allegory*. "Out of the eater came forth food, and out of the strong came forth sweetness."

Cornelius Nepos says of Atticus, "If that pilot gains the greatest reputation, who preserves his ship in a rough and rocky sea, ought not he to be thought a man of singular prudence, who arrived in safety through so many and so great civil *tempests?*"

Allegory consists in describing a *secondary* subject, having the properties of the *primary* subject. Thus the allegory which describes a vineyard, Psalm lxxx. is intended to describe the nation of Israel. It is in *words* what hieroglyphic is in *painting;* it presents the images in the mind, the one seen representing one not seen.

A *parable* is a fable founded on something real or apparent in nature or history, from which a moral is drawn. Such are the parables of Dives and Lazarus, of the Prodigal Son, and of the ten Virgins in the New Testament.

FIGURES.

A *figure* in rhetoric is a mode of speaking different from that which is common, more beautiful and emphatical; or it is language suggested by the imagination or passions, and may be called natural eloquence.

Figures may be in words or sentences. When Cicero was impeaching that vile conspirator, Catiline, he employed all his powers of eloquence before the Senate, in order to bring him to punishment. In that case it may be said, *Cicero appeared like Cicero.* If we alter the form of the sentence and say, at that time *Cicero appeared like himself*, the figure would be lost.

A verbal figure may be when there is a *deficiency* of words, or a *redundancy*, or a *repetition.*

A deficiency of words may be in *ellipsis*, or in *asyndeton.*

An *ellipsis* is when one or more words are wanting to complete the construction; as when we say, *the more danger* in *battle*, the *more honor in victory;* that is, the *more honor is gained.*

Asyndeton is when the connectives of the members of the sentence are omitted, to denote the celerity of an action, or the haste and eagerness of a speaker. There is a good example of this in the words of Cesar when relating his speedy conquest of Pharnaces he writes, *Veni, vidi, vici! I came, I saw, I conquered.*

Redundancy of words is in *pleonasm*, or *polysyndeton.*

A *pleonasm* is the use of more words than are necessary, as when we say, *where in the world is the man?* instead of *where is the man?*

A *polysyndeton* is when the several parts of a sentence are united by proper connectives. This gives weight and solemnity to an expression, and by retarding the course of the sentence, gives time for the mind to consider more distinctly every part of it. Thus Demosthenes, when encouraging the Athenians to prosecute a war against Philip of Macedon, says, "You have ships, and men, and money, and stores, and all other things which constitute the strength of the city, in greater number and plenty than in former times." Among modern authors, Chalmers is much distinguished for the use of this figure.

Repetition is when the same word in sound and sense is repeated; or one of a like sound or signification; or both.

Of this figure there are several sorts.

Antanaclasis is when the same word in sound, but in a different sense, is used: as, "*Care* in youth may free you from *care* in old age." Here the same word, *care* in youth, signifies provident care, or caution; but in the latter clause, it has the sense of anxiety.

"Follow me, and let the *dead* bury their *dead.*" Here the former word *dead* refers to a *natural* death, and the latter to a *spiritual* death.

"*Young Cato wants experience, but yet he is Cato.*" That is, he has the firmness of the family.

When the same word is repeated with vehemence, it is called *epizeuxis*, a superaddition or joining: as, "*O Jerusalem, Jerusalem*, thou that killest the prophets."

Climax is a rising in the progress of the sentence, and a beautiful repetition, when the word which ends one member of a sentence begins the next: as, there is no security without government, no government without the execution of law, no execution of law without obedience.

Anaphora is when several sentences, or members of a sentence, begin with the same word. This is sometimes an elegant figure. Cicero says to Catiline, "You do nothing, you attempt nothing, you think nothing, but what I not only hear, but see and plainly perceive."

Epistrophe is the contrary to the anaphora, and makes the repetition of the same word at the end of each member of the sentence. Thus, "since concord is lost, friendship is lost, fidelity is lost, liberty is lost, all is lost."

When a sentence ends with the word which begins it, this is called an *epanalepsis:* as, "virtue includes all good things; he wants no good thing who has virtue."

When the following sentence or member begins with the same word which ends the former, it is termed *anadiplosis,* or duplication: as, "Let us think no price too great for *truth; truth* can not be purchased at too great a price."

Epanodos is the inversion of a sentence, or a repeating of it backward, so that it comprehends the two last figures. Thus, "It may be ridiculous to lament what you worship, or to worship what you lament."

"Woe to you who call good evil, and evil good; who put darkness for light, and light for darkness."

Paronomasy is when two words very nearly alike in sound, but different in sense, respect each other in the same sentence: as, a "friend in need is a friend indeed." This is a pun, but sometimes the use of a pun may enliven conversation. In general, puns are considered to be low wit.

Homoioptoton, a like case or cadence, is when the several parts of a sentence end with the same case, or a tense of the like sound. Thus, "Wisdom may complain that she is either willfully despised or carelessly neglected; either openly scorned or secretly abhorred."

Synonymia is when words have the same sense; but in rhetoric this figure comprehends words which are nearly synonymous: as, to *desire* and to *entreat;* to *deceive, impose on, cheat, defraud.*

Derivation, in rhetoric, is when words derived from the same root, as, *just, justice, unjust, injustice,* come together; as, "Let those who are just themselves not countenance *injustice* in others."

Prolepsis is anticipation, as when an orator states an objection which he foresees his opponent may make, and then answers it. This is a common practice.

Parabole is a similitude illustrating a thing by comparing it with another, to which it has resemblance: as, "What light is to the world, water is to the thirsty, and rest to the weary, such is knowledge to the mind."

Antithesis, or opposition, is the comparing of things different or contrary, to render them more evident. Thus, Cicero says, "the Roman people hate private luxury, but love public grandeur." The beauty of this figure is hightened, when a member of the sentence is inverted: as, "compare this peace with that war."

To this figure may be referred the *oxymoron*, or smart saying, which presents a seeming contradiction; as, "you will kill me with kindness." "I am never less alone, than when alone."

Epanorthosis, correction, is a figure by which a speaker recalls, or corrects what he has said: as, "he threw away his estate: no, he employed it in acts of charity."

Paralepsis, omission, is, when a speaker pretends to pass by what he, at the same time, declares. As when he says, "I will omit this, or that," but repeats what he pretends to omit.

Parrhesia is *reprehension*; thus Cicero addresses the Senate, when charging them with the death of Servius Sulpicius. "*You*,—it is a severe expression, but I can not help saying it,—*you*, I say, have deprived Servius Sulpicius of his life."

Aparithmesis is *enumeration*, when that which might have been expressed in a few words, is branched into several particulars.

Hypotyposis, or *imagery*, is a description of things in strong and bright colors: as, "He was serious with the reserved, and pleasant with the jocose; grave with the aged, and facetious with the young; bold with the daring, and extravagant with the profligate."

Aporia, or *doubt*, expresses the deliberation, or hesitation of the mind; as, "I know not what to say, or which way to turn myself."

Ecphonesis, or *exclamation*, is a vehement utterance, occasioned by some commotion of the mind: as, "O mournful day; calamitous to the state, and afflictive to me and my family!"

Epiphonema, or *acclamation*, is when a speaker, at the conclusion of his argument, makes some just and lively remark on what he has said, to give it the more force: as, "Thus to think, is prudence, thus to act, is fortitude; both to think and act, is consummate virtue."

Apostrophe is when a speaker breaks off from a series of remarks, and addresses himself to a particular person, present or absent, living or dead, or to an inanimate object: as, "Hear, O heavens, and give ear, O earth, for the Lord hath spoken."

Prosopopy includes personification, but is more extensive in its application. By this figure, an absent person is introduced speaking; or one who is dead, as if alive and present; or speech is attributed to some inanimate being. This is a common and useful figure.

EXERCISES ON THE TROPES AND FIGURES.

Let the pupil tell the names of the following tropes, and explain their significations.

God is *light.* I John, i, 5. Christ says, I am the *light* of the world. John, viii. 12. The Jews had *light.* Esther, viii. 16. Ps. cxix. 105.

The people that walked in *darkness.* Is. ix. 2. See Math. xxii. 13. John, iii. 19. Joel, ii. 2. Is. lx. 1, 2.

God is called a *rock.* Ps. xviii. 2, 31.

God is called a *shield.* Gen. xv. 1. Ps. xxxiii. 20. Prov. xxx. 5.

God is called a *fortress.* II Sam. xxii. 2. Ps. xviii. 2.

The *horn* of David. Ps. cxxxii. 17. See Ps. lxxv. 10. Jer. xlviii. 25.

Hope is an *anchor* to the soul. Heb. vi. 19.

Christ is the *end* of the law. Rom. x. 4.

Ends of the earth. Ps. xcviii. 3. Ps. xxii. 27.

Vine, Vineyard. Is. v. 1, 2. Ps. lxxx. 8. Math. xxi. 33.

Christ, the good *shepherd:* John, x. 11. Ps. xxiii. 1. lxxx. 1.

Pastor. Jer. iii. 15. Eph. iv. 11. Jer. xii. 10.

Life. Rom. viii. 6. Col. iii. 3. Rom. v. 17. Job, xxxiii. 20. Col. iii. 4.

Bread of life. John, vi. 35, 51.

Mount, Mountain. Is. ii. 2. Ezek. xviii. 6. Is. xl. 4.

Bow down the ear. Ps. xxxi. 2. Prov. xxii. 17.

Incline the ear. Ps. lxxviii. 1. The heart. Josh. xxiv. 23.

Lion. Rev. v. 5. Gen. xlix. 9. I Peter, v. 8. II Tim. iv. 17.

Serpent. Gen. iii. 1. xlix. 17. Rev. xii. 9.

Rod. Is. xi. 1. Rev. ii. 27. I Cor. iv. 21. Ps. xxiii. 4., and *Staff.*

Scepter. Gen. xlix. 10. Is. xiv. 5. Amos, i. 5.

Crown. Lam. v. 16. I Cor. ix. 25. Rev. iv. 4.

Flower of age. I Sam. ii. 33. I Cor. vii. 36.

Sing, O heavens. Is. xliv. 23.

Sun of righteousness. Malachi, iv. 2.

To take up one's cross.

White robes. Rev. vi. 11. O God, cause thy face to shine.

Bloom of youth.

To soften or melt the heart. To harden the heart.

Hark! the numbers soft and clear,
Gently *steal* upon the ear.

Melancholy lifts her head,
Morpheus rouses from his bed,
Sloth unfolds her arms and wakes,
Listening envy drops her snakes.

Intestine war no more our passions wage.

But hark! the groves rejoice, the forest rings.

The wilderness and the solitary place shall be glad, and the desert shall rejoice and blossom as the rose. Is. xxxv. 1.

Hostile plains. Impious hands. Mellow notes.

Christianity is the corner stone of a republican government.

The morning of life.

The dead of night.

A light heart and a heavy heart.

Faneuil Hall, the cradle of the revolution.

PRONUNCIATION AND READING.

The first thing necessary in reading, is such a familiarity with *words*, that the reader knows how to pronounce them the moment they are presented to the eye. If he is obliged, when he sees a word, to hesitate in regard to its pronunciation, he can not read well. This familiarity with words is to be acquired only by practice; and it is to precede any special attention to definitions; for whether a learner understands what he reads or not, he cannot read with propriety, until he knows words so well, that he can utter them without hesitation.

Orthoepy, or a correct pronunciation of words, depends chiefly on *usage;* and usage is the established or common practice of the educated part of a nation. This usage constitutes the standard of pronunciation, as far as public opinion is susceptible of a standard.

This usage, however, is far from being uniform and determined in all cases. Men differ in opinion and taste, and there is no law which can compel them to agree. Hence, some differences in pronunciation exist in the practice of the higher classes of society; and the poets, whose influence in regard to accentuation is not inconsiderable, have, in some instances, given a wrong direction to the pronunciation of words. To these considerations may be added, as one cause of differences in pronunciation, the great diversity of dialectical pronunciation in Great Britain.

Several attempts have been made in England, to establish a standard of pronunciation; but without complete success.

After all the efforts of five or six compilers of dictionaries, who have, within the last half century, published works for this express purpose, there are more than a thousand words, whose pronunciation is yet unsettled. And I am informed, that the higher classes of society in England, rarely or never consult books to learn pronunciation: they are governed solely by the practice of the most respectable speakers in Parliament and in judicial tribunals.

In determining the sounds of the vowels, and the pronunciation of some combinations of letters, some of the writers have, undoubtedly, made mistakes, either from being accustomed to inaccurate practice, among the dialects that prevail in England, or from attempting too much accuracy in distinguishing sounds, or from mistaking slight differences in articulation.

Thus the orthoepists seem to be agreed that the sound of *u* long, in English, as in *duty*, is the compound sound of *eu* or *yu*. Thus it is said that *tube*, *cubic*, are pronounced *tewbe*, *kewbic*. But this is obviously a mistake; these words, by the best speakers, and by common speakers, are not thus pronounced, either in England or the United States. The letter *u*, is by one writer, said to be exactly the pronoun *you*. This is true only in such words as *unit*, *union*, *measure*, &c., its common sound, as in *tumult*, *tribunal*, is not the sound of *eu*, *ew*, or *yu*. A man must have a very inaccurate ear to warrant him in pronouncing such an opinion.

The proper sound of *u* long, is not quite so simple as that of *a*, *e*, and *o*; but it is nearly so, and ought to have a place among the vowels, or a place by itself. The mistake of the orthoepists has been followed by evil consequences, in the pronunciation of certain classes of words in our language.

In attempting to ascertain the true sound of *nk*, in such words as *bank*, *brink*, a great error has been committed. By making the *n* in such words equivalent to *ng*, the writers have entirely mistaken the fact; but even if they were correct, no rule ought to have been suggested on the subject; for this obvious reason, the true pronunciation of such words has never been mistaken. The rule does no good, and it may, and probably does mislead learners in a multitude of cases.

Thus some of our American writers have made a great mistake, in supposing the vowel *a* to have a distinct sound before the letter *r*, in *parent*, *apparent*, *bare*, *pair*, from that in *fate*, *lane*, *grain*. Now there is nothing in the slight difference in the sound of *a*, in these words, which does not arise from the articulation of the letter *r*. In all cases, there is a very slight sound of *e* between any vowel and that letter. Thus, *more*, *mire*, *mure*, are pronounced *moer*, *mier*, *muer*. This is a peculiarity which is unavoidable; it is never mistaken, and therefore nothing should have been done to disturb the common usage.

In like manner, the sound of *o* is affected by the following consonant, in *cost*, *lost*, in which the sound is somewhat prolonged by the following *s*; the sound being longer than when followed by a closer articulation, as in *cot*, *lot*. Indeed, the vowels in many other situations, are subjected to slight variations, by the consonants which follow them; but no distinction should be noted in rules, except when there is a real difference of sound of the vowel, independent of the consonant.

But in *mast*, *last*, *grass*, there is such a difference in the sound of *a*, which is distinct from its sound in *mat*, *bad*, *pat*. The difference is obvious in the words *bar* and *barrel*; and Walker has done great injury to orthoepy, in attempting to reduce the sound of *a* before *s*, to a uniformity with that before other consonants.

In these attempts to ascertain sounds with great precision, distinctions have been supposed or created without use; too much legislation on this subject, as in government, serves to bring rules into neglect. A few simple principles are all that will be regarded; the minuter differences of sounds, must be left to be acquired by practice.

In pronunciation, a distinct articulation is to be regarded as of prime importance.

Articulation is a joining, or joint. In language, it is the joining of the organs of speech, before and after the vowels. The letters which represent these joinings, are called *consonants;* so named because they have no sound, or a very indistinct one, and are used only in connection with vowels. Thus, in uttering the word *pen*, we first close the lips, then open them to utter the vowel *e*, then place the tip of the tongue against the root of the upper teeth. The close pressure at the beginning, prevents all sound, and *p* is called a close or mute consonant; but the position of the lips so modifies the sound of *e*, that we have no difficulty in distinguishing the word *pen* from *ben*, which is nearly allied to it in sound. The junction of the tongue to the gum or root of the teeth, is not so close, and the consonant *n* is accompanied with a slight nasal sound. This consonant, therefore, is called a semi-vowel.

Now, as we have few organs for forming sounds, we are obliged to use the same organs to make different sounds. This difference is made by a slight difference in the position of the organs, or in a greater or less degree of closeness of contact or pressure. Hence proceeds the necessity of carefully attending to the position of the organs, in uttering sounds; and hence the value and use of a distinct articulation in pronouncing words. We observe that *b*, *p*, and *m*, are all formed by the lips; yet by slight differences in the position or closeness of the lips, we make a perceptible distinction in the utterance of *ben*, *pen*, and *men*.

On a distinct articulation depends, in a great measure, the excellence of pronunciation. In this respect, the common people of the United States are remarkably distinguished from the common people of our father land. The difference is so obvious, as to be a subject of observation by foreigners. The reasons are not obscure. Most of the children in our country, have the advantage of attending schools; and they are accustomed for years, to pronounce words classed according to their accents and terminations, and divided into syllables. In this division of syllables, the letters of each syllable are, as far as practicable, *united*, as in *ten-or*, *vig-or*, *char-ac-ter*, *dec-la-ma-tion;* so that a good articulation is a natural consequence of this classification. To this classification in our elementary books, and to the customary repetition of the classes of words in schools, our children are indebted for the best popular pronunciation, probably, ever known in a nation.

Another important article in pronunciation, is *accentuation*, which is a full utterance of some particular syllable, or syllables, in almost every word. The reason of this distinction of syllables, is to enable a reader or speaker to utter words of several syllables with ease. The accented syllable is a sort of resting place for the voice; and when the word is long, and is composed of difficult combinations of letters, it is found convenient to use a secondary accent. In words consisting of not more than three syllables, the primary accent only is wanted, as in *importance*, *adventure*. So, also, when the unaccented syllables in words of four syllables, are easily uttered, one accent is generally sufficient, as in *facility*, *convenience*. But in such words as *determination*, *inferiority*, the ease of pronunciation demands that two syllables should be accented; and we lay the primary accent of the former on the *fourth* syllable, *a*, and the secondary on the *second*, *ter;* in the latter, the secondary accent is on the *first* syllable, and the primary on the *fourth*. In a few words of more syllables, we use three accents; as in *incomprehensibility*, which accents are laid on the second, fourth, and sixth syllables.

In determining the proper seats of the accent, the facility of utterance has been the great regulator, and not arbitrary rules founded on terminations. As far as the terminating syllable has had an influence, it has been in consequence of the similar formation of words, or of the corresponding length of the words. Thus, all words ending in *tion*, and *sion*, have the accent on the syllable next preceding that termination; and for the obvious reason, that such an accentuation renders the utterance of the whole word more easy to the organs, than any different accentuation. Every man's ear and organs will determine this point.

But there is no rule which will, in every case, decide in favor of accenting alike, words of similar formation. Deviations from general rules often occur, either from negligence in those who have established the usage, or from some peculiarity in the combinations of letters in particular syllables. Thus, *admirable* has the accent on the first syllable, but *deplorable* on the second; although these words are of like formation. Thus, also, it is a general rule, that words ending in *ic*, have the accent on the penultimate syllable; yet *choleric*, *lunatic*, *sulphuric*, *plethoric*, and a few others, are exceptions.

But in settling the accent of some words, there has been evidently a neglect of rules or principles, which, if they had been observed, would have prevented deviations. Thus, *horizon* now has the accent on the second syllable, in opposition to the usage in every word of like formation in the language; as in *orison*, *unison*, *artisan*, *citizen*. And so powerful is the principle of uniformity, that in this case, the word *horizon* was formerly pronounced, universally, with the accent on the first syllable, and so common people still pronounce it.

Thus also the verbs *attribute*, *contribute*, *distribute*, have the accent on the second syllable, in opposition to the true principle or rule in such words, and in opposition to the accent of other similar words; *constitute*, *destitute*, *institute*, *substitute*, And in this class of words we also see the force of the rule of uniformity, for multitudes of our common people pronounce *contribute*, *distribute*, *attribute*, the verb, with the accent on the first syllable.

The word *composite*, in architecture, ought to have the accent on the first syllable, like *apposite*, and *opposite*. The words *deposit* and *reposit*, are verbs, and their participles require the accent on the second syllable.

These deviations from analogy are unfortunate; but they can not be easily corrected.

The principle of analogy is to be observed in every case, unless established usage has determined otherwise. It is for this reason that I lay, upon the first syllable, the accent of *avenue*, *detinue*, *retinue*, *revenue*. For a like reason, I lay the accent of *imbecile*, on the first syllable, as the word is in analogy with *juvenile*, *puerile*, *versatile*, *volatile*. The consonants in *prehensile* and *retractile*, take these words out of the rule.

The pronunciation of *produce* and *project*, the nouns, as if divided *prod-uce*, *proj-ect*, is, in my opinion, unfortunate. They ought rather to be pronounced *pro-duce*, *pro-ject*, in analogy with *pro-test*.

Thus, also, I would have *patriot*, *patron*, *matron*, pronounced with the consonant in the first syllable, as it is in *patent*. In all such cases, uniformity is to be desired.

The words, *deponent* and *opponent*, ought to have been accented on the first syllable, like *competent*, *consonant*, *dissonant*, *insolent*, and others having the like termination.

There has been, among the writers on pronunciation, too little regard paid to the secondary accent of words. We observe this neglect in the English accentuation of *orthoepy*. With the accent on the second syllable, this is a harsh, disagreeable word; but with the primary accent on the first syllable, and a secondary accent on the third, the word is agreeable and easily pronounced.

It is a fault also in accentuation, to pay too little regard to the ease of utterance. We observe this in the common pronunciation of *centripetal* and *centrifugal*. The accent on the second syllable renders the words harsh and of difficult utterance. The accent should have been laid on the third syllable. For the like reason, *irrefragable* should have the accent on the third syllable, and *refractory* on the second.

Another circumstance ought to be considered; that is, the effect which the addition of a syllable has in determining the proper place of the accent. It is very easy to accent the second syllable of *demonstrate*, *alternate*, *contemplate*, *confiscate*, *extirpate*; but when the terminations of the participles are added, the pronunciation, with the second syllable accented, becomes difficult. For this reason I lay the accent on the first syllable of the verbs, and a secondary accent on the penultimate syllable of the participles, which renders the pronunciation easy; *dem′onstra′ting*. In doing this, I am justified by the fact, that this accentuation takes these words out of the list of anomalies, and restores them to the list of regular analogies; for verbs of this formation constitute, probably, the most numerous class in the language, and almost all have the accent on the first syllable, such are *abrogate*, *derogate*, *advocate*, *dissipate*, &c. The exceptions are few, and these are made for this good reason, that the words contain some difficult combination of consonants, as in *inspissate*.

There is a strong tendency in this country to adop English practice, even when anomalous; our citizens s inclined to give up our own practice, even when *right* o *gular*, and follow the English, even when *wrong*. Thu this country, before Walker's dictionary was circulated word *deaf*, was pronounced *deef*, in analogy with *leaf*, s But the English have *def* from the Danish dialect, an citizens seem disposed to abandon our Saxon pronuncia and adopt that of the English. I should prefer, in such c to adhere to our own practice; for if either party must their practice, let the English adopt what is regular, r than that our citizens should adopt what is irregular. time must come when the hundreds of millions of the i itants of North America, will have strong claims to influ on such questions as this.

The word *engine* ought to be pronounced with *i* lo analogy with *empire*, *umpire*. *Beerd* for *berd* or *baird*, the nunciation of *beard*, is a mistake proceeding from an i ance that this word is from the verb, to *bear*.

In a few instances, a word, when a noun, has the a on the first syllable, and when an adjective, on the secon com′pact, an agreement; and compact′, close; min′ute of and minu′te, small.

There is a considerable class of words, nouns, and a tives, which have the accent on the first syllable; but they are used as verbs, the accent is transferred to the se syllable. Such are ab′sent and to absent′; con′duct and duct′. This change is for rendering it easy to pronounc participles, *absented*, *conducting*.

In some instances, the accent of a word is changed f sake of expressing contrast; as sins of *o′mission* and of *mission*.

> “He must in′crease, but I must de′crease.”

As *accent* is a particular stress of voice upon a *syl* *emphasis* is a particular force of utterance laid on some in a sentence, by which it is distinguished from others. this force or quantity of voice, the word is rendered significant, and often it varies the sense of the whole tence. Take the following sentence as an example. *you ride to town to-day?* This question is susceptible o *different* meanings, and of consequence, will admit of different answers, according to the placing of the emphasis. If the emphasis is laid on *you*, the question is, whether *you* or *another person* will ride to town. If the emphasis is laid on *ride*, the question is, whether you will *ride* or go on *foot*. If the emphasis is laid on *town*, the question is, whether you will ride to *town* or to *another place*. If the emphasis is laid on *to-day*, the question is, whether you will go *to-day* or on some *other day*.

Cadence is a falling of the voice in pronouncing the closing syllable of a sentence. This must be varied according to the nature of the sentence. Interrogative sentences often require the last word to be pronounced with an elevation of voice, but not in all cases. In the question, "Betrayest thou the Son of man with a *kiss?*" the last word is emphatical, and must be pronounced with raised tone of voice. But in the following: "Where is *boasting* then?" the emphasis is on *boasting*, and requires that word to be uttered with an elevation of voice.

By what *law?* of *works!* No, but by the law of *faith*.

But another circumstance deserves notice. In the utterance of some of the emphatical words, there is a slide of the voice upward at the close. This is the case with the enunciation of *kiss* in the first question, and of *works* in the last. But in the word *boasting*, and in *law*, there is a slide downward, at the close of the voice.

Words in contrast are often emphatical. A *good* tree cannot bring forth *evil* (bad) fruit; neither can a *corrupt* tree bring forth *good* fruit.

It will be seen by these examples that the force, and often the propriety and meaning of a sentence, depend on emphasis. Hence it is apparent, that to read well a person must understand what he reads.

Good reading then consists in a distinct utterance of words; that is, of a clear enunciation of the letters and syllables, with the proper articulation and accent; and the placing of the emphasis upon the proper word or words in the sentence; at the same time a due regard is to be had to the pauses. (See *punctuation*.)

Further, both in reading and speaking, the tones and modulations of the voice must be adapted to the subject, whether grave and solemn, or animated and impassioned. In speaking, the looks also, and the gestures, are to be adapted to the subject.

Reading and speaking should, ordinarily, be performed with the natural pitch of the voice. If the speaker finds it necessary to make himself heard at a great distance, he is not to raise his voice to a higher key for the purpose, but to speak with a louder voice, or what may be termed a greater quantity of voice, on his natural key.

There is, in reading and speaking, one general rule which comprehends all others, and this is, to read and speak with the same voice, the same tones, the same modulations, and the same emphasis, as the reader or speaker would use in familiar conversation.

If a man asks the question, *does it rain?* the voice rises in pronouncing *rain;* but in the answer, *No, it is fair*, the voice falls; that is, it begins on the same key on which the other words are uttered, but it slides downward, and ends on a lower key.

"Does a man ask with importunity? No, with moderation."

In this question, the voice rises on the accented syllable, and on those syllables which follow, in *importunity*, and continues at the same elevation to the end of the word. In the answer, the voice falls on the last syllable of *moderation.*

When the question consists of two clauses, connected by the disjunctive *or*, the voice rises on the last word of the former clause, and falls on the last word of the latter clause. Thus, shall I *go*, or shall I *stay?*

In negative sentences, consisting of two clauses, the voice rises on the last word of the former clause, and falls on the last word of the latter clause: Thus, "It is neither one nor the other; it is neither John nor Thomas."

This is the natural manner in which every person utters his own extemporary language. I call it *natural;* but if *acquired* by custom and habit, it is so uniform as to constitute invariable usage. The observation of this natural mode of speaking is the best instructor in reading and speaking; and this, with oral instruction and examples, supersedes the necessity of other rules.

COMPOSITION AND STYLE.

Composition in writing is the formation of sentences for the expression of ideas.

Style is the manner in which sentences are composed and arranged. Every writer has a manner, and generally a peculiar manner, of expressing his ideas, which forms his style.

Styles are of several kinds or characters. The more common characteristics of style, are strength, vehemence, elegance, brevity, copiousness or diffusiveness, precision, looseness, terseness or neatness, feebleness, and dryness.

The *strength* of style consists in the use of bold, forcible words and phrases, adapted to exhibit striking images; and the omission of small unimportant words.

A *vehement style* is allied to the foregoing, but is characterized by the use of words expressive of earnestness or feeling, and so arranged as to excite a rapid succession of ideas.

Elegance consists in the use of the most proper words, and a smooth natural arrangement of all the parts of sentences.

Brevity consists in the use of few words to express the ideas intended.

Precision is allied to brevity; it consists in the use of as few words as the clear expression of ideas will admit, and a freedom from all superfluous words, together with a lucid arrangement of words, clauses, and members of sentences.

Copiousness consists in the use of all the words and phrases necessary to a full expression of all the material ideas intended to be communicated.

Diffusiveness is allied to copiousness; but it may include the use of superfluous words and phrases.

A *looseness of style* is opposed to precision, and is characterized by a negligence of expression and arrangement of the parts of a sentence.

Terseness, or *neatness* of style, is allied to brevity and precision, as it excludes the use of superfluous words, and includes a good arrangement of the parts of sentences.

Feebleness in style consists in the use of an undue proportion of unimportant words, and of words not adapted to make much impression on the minds of readers.

To this is allied a *dry* style.

A good style consists of such properties as are best adapted to the subject, and of these properties, *perspicuity* and *ornament* are the most prominent.

The first and most important quality of style, or diction, is *perspicuity*, for the want of which there is no substitute. This consists in the use of intelligible words and phrases, arranged in the most natural order, presenting each clause or member of a sentence in such a manner that the connection between them is obvious. In a perspicuous style, the reader or hearer should be able to understand what he reads or hears, as soon as he sees or hears the words. If an attentive reader, in order to understand a sentence, is obliged to read it a second time in order to comprehend it, the style is faulty.

Perspicuity includes *purity*, *propriety*, and *precision*.

Purity of style is the use of words well authorized by good usage. *Propriety* consists in the use of such words as are best adapted to express the ideas intended to be conveyed.

Precision has been explained.

In the construction of sentences, perspicuity requires that the several clauses and members most nearly related to each other, should be so arranged, that their connections may be obvious. Perspicuity depends much on a proper collocation of the parts of a sentence. A want of such collocation is seen in Genesis xviii. 27, in the common version of the scriptures. And Abraham answered and said, "Behold now I have taken upon me to speak to the Lord, who am but dust and ashes." Here *who*, in the last member of the sentence, is related to *I*. The arrangement should be as follows: "Behold I, who am but dust and ashes, have taken upon me to speak to the Lord."

Another example of wrong arrangement.

"It would puzzle a man to keep flies, which buzz in August, through the winter." The proper arrangement is, "It would puzzle a man to keep, through the winter, flies which buzz in August."

"Our Lord Jesus Christ has given, by his suffering a bloody and ignominious death, this excellent example to his disciples."

This would be better thus: "Our Lord Jesus Christ has, by suffering a bloody and ignominious death, given this excellent example to his disciples." This alteration brings *given* directly before the words *this excellent example*, which are *governed* by it.

"I have deceived wiser men than you in my time." Here the *time* should immediately follow *have:* "I have, in my time, deceived wiser men than you."

In the following sentence, there is a good arrangement of the several members and clauses.

"Parents, unless when under the immediate influence of some strong passion or prejudice, very rarely oppose, by design, the real interests of their children."—*Dwight.*

In this sentence the use of points is well exemplified. The comma after parents, separates that word from the next member of the sentence, and shows the reader that the word is connected with the verb *oppose;* and the words *by design,* stand immediately after *oppose,* with which they are connected, and the comma after *design,* separates that word from the following, which are governed by the verb *oppose.* The member beginning with *unless* might have been placed at the end of the sentence, without creating obscurity; but the present order of the parts of the sentence gives to the last words, which are the most important, the most prominent place.

In Dr. Campbell's translation of the Introduction of Luke's Gospel, there is the following passage: "I have also determined, having exactly traced every thing from the first, to write a particular account to thee, most excellent Theophilus."

Here the second member of the sentence should follow the first words. "I also, having exactly traced every thing from the first, have determined to write a particular account to thee, most excellent Theophilus." If the name of the person addressed had been omitted, the words, *to thee,* should have been placed immediately after *write:* but as the name is mentioned, they stand in their proper place.

In Genesis xlix. 30, and l. 13, the members of the verses are badly arranged, especially in the latter. In both, the words, *of Ephron,* should immediately follow *bought.*

In the construction of sentences, care should be taken to preserve unity of subject, and to avoid the insertion of a great number of circumstances, which perplex the reader. The following sentence is from Keith's Demonstration of the Truth of Christianity. Writing respecting the Jews, he says:

"But the humble inquirer after truths to be believed, not doubting the existence of a people previous to their captivity, in tracing them from some region on earth, is inclined to think that they may possibly have come from that very country to which, on the expiry of their captivity, they returned; with authority to repossess it and to build their temple, Judea, their father land, called by their name, and claimed as their own, their absence from which, they had long pathetically bewailed, and to which they turned, as their descendants still do, whenever they pray to the God of their father; a land, it may be added, to which their races still look, in fond hope of a second and last return, not after a captivity of seventy years within the walls of a single city, but after a dispersion for more than seventeen centuries throughout all the nations of the earth."

How can a gentleman, accustomed to read English books, write in this manner?

The use of parentheses is to be avoided as much as possible, and when admitted, they should be very brief. Rather than admit two or three lines in a parenthesis, the sentence should be divided, and the passage intended to be parenthetical should form a separate sentence.

Precision requires the omission of useless words; and as a general rule, words which repeat the ideas before expressed, are useless, at least, if not worse than useless.

"*There is* nothing *which is* more displeasing than affectation."

Here the two first and fourth and fifth words are superfluous.

There is in the common version of the scriptures, a great use of superfluous words in the rendering of the participles of the original. "*And when we had sailed* over the sea of Cilicia and Pamphylia," Acts xxvii. 5. The original is, *Having sailed* over the sea of Cilicia and Pamphylia.

And *when we had sailed* slowly many days, would be better thus: *Having sailed* slowly many days.

And *when the south wind blew softly*, would be better thus: *The south wind blowing softly* or *gently*.

This form of expressing participles runs through the version, multiplying greatly the number of useless words; but as this rendering does not impair the sense, it is of the less importance.

As a general rule, prepositions should not be separated from the words which they govern. Thus, "That is the most unfortunate expedient which he could resort *to*," is a less elegant collocation of words than, "That is the most unfortunate expedient *to* which he could resort." There are, however, exceptions to this rule, which must be left to the taste and judgment of the writer.

It is also a good rule, that some important word or clause should begin a sentence; that the less important should appear between the beginning and end; but the sentence should close with a word of importance, and the most impressive ideas.

Precise rules, however, can not be always observed.

"And his kingdom was *established greatly.*" 1 Kings xi. 12.

In this sentence both the sense and the force of expression require the following order of words: "And his kingdom was *firmly established.*"

There is one general rule which every writer and speaker should observe; which is, first to gain clear ideas on the subject, then to arrange them in their natural or most impressive order.

But to acquire a good style, it is important that a person should accustom himself to read the works of good writers. Examples of this kind are far the best instructors; indeed, without such helps, a person rarely acquires a good style or facility in writing.

Neither good speaking or good writing can be effectually taught by lessons on paper. Oral instruction in reading and speaking, and the study of the style of classical authors, are absolutely necessary for a student aiming to become master of these accomplishments.

CHAPTER XII.

RULES OF ORTHOGRAPHY.

RULE 1. When a syllable, or syllables, are added to a word ending in a consonant, the orthography of the word is rarely altered. Thus, from *amend* are formed *amended*, *amending*, *amendable*, *amendatory*, *amendment*; the original word remaining without any change of letters.

Rule 2. The terminations *ful*, *less*, *ric*, *rick*, *dom*, *some*, *ard*, *head*, or *hood*, *like*, *lock*, *ship*, and generally *ment*, are added without any change of the original word. In general, *ly* is added after a vowel, without a change of the original word, as *love*, *lovely*; *home*, *homely*.

Rule 3. When the original word ends in *e*, and the termination, or syllable added, begins with *e*, one of these letters is omitted. Thus, from *accuse*, we form *accused*, *accuser*, not *accuse-ed*, *accuse-er*. So when *ence*, *ent*, or *ous*, is added, as in *diverge*, *divergence*, *divergent*; *adherence*, *adherent*; *adduce*, *adducent*; *rapture*, *rapturous*.

Rule 4. When the original word ends in *e*, and the termination begins with *i*, the letter *e* is omitted; as in *compose*. *composing*. The exceptions are *dyeing*, *singeing*, in which *e* is retained to distinguish these words from *dying*, *singing*. Before *ty*, *e* is changed to *i*, as in *fertile*, *fertility*; *hostile*, *hostility*.

Rule 5. When the original word ends in the single vowel, *y*, and the termination begins with *e* or *o*, the letter *y* is omitted, and *i* is substituted; as in *deny*, *denied*, *denier*, *fortified*, *glory*, *glorious*. But when the termination begins with *i*, the letter *y* is retained; as in *denying*, *fortifying*, *complying*. But before *ous*, *y* is sometimes changed to *e*, as in *duty*, *duteous*; *plenty*, *plenteous*; *beauty*, *beauteous*.

Rule 6. When the original word ends in *ee*, and the termination begins with *e*, one *e* is omitted, as in Rule 3, an example of which occurs in *agree*, *agreed*. But when the termination begins with *i*, or with a consonant, both letters, *ee*, are retained: as in *agreeing*, *agreement*; so also, before *able*, as in *agreeable*.

Rule 7. When the original word ends in *ay*, *ey*, *oy*, *ow*, it suffers no change of orthography in the derivatives. Thus we write *delay*, *delayed*, *delayer*, *delaying*; *alloy*, *alloyage*, *alloyed*, *alloying*; *survey*, *surveyed*, *surveyor*, *surveying*; *allow*, *allowable*, *allowed*, *allowing*; *annoyance*.

To this rule, usage has improperly established the following exceptions: *laid*, *paid*, *said*. These ought to have been written *layed*, *payed*, *sayed*, as in *allayed*, *decayed*, *stayed*.

Rule 8. Before *a*, the letter *e* is omitted, as in *arrive*, *arrival*; *reverse*, *reversal*; *assure*, *assurance*; *resemblance*, *semblance*; *examine*, *examination*.

Rule 9. Before *a*, the letter *y* is omitted, and *i* substituted: as in *defy*, *defiance*; *rely*, *reliance*.

Rule 10. The letter *i* is substituted for the terminatin letter *y*, before consonants: as in *certify*, *certificate*; *fortify*, *fortification*; *holy*, *holiness*; *bounty*, *bountiful*.

Rule 11. The final *e* is omitted before *able* and *ible*; as in *abate*, *abatable*; *move*, *movable*. So in *reconcilable*, *ratable*, *salable*.

Exceptions. After *c* and *g*, the final *e* is retained, to prevent a wrong pronunciation: as in *peaceable*, *chargeable*.

Rule 12. Monosyllables ending in a single consonant after a single vowel, have the last consonant doubled in the derivatives: as in *beg*, *begged*, *begging*, *beggar*; *rob*, *robbed*, *robber*, *robbing*.

Rule 13. When words of more syllables than one, end in a single *accented* consonant, after a single vowel, that consonant is doubled in the derivatives: as *abet*, *abetted*; *abetting*, *abettor*. So in *admit*, *permit*, *regret*. This rule is intended to prevent a wrong pronunciation, to which we should be liable, if the words were written *abeted*, *abeting*; *admited*, *admiting*.

Rule 14. But when the *accent* does not fall on the *last consonant* of the words described in the foregoing rule, the last consonant is not to be doubled, as there is no danger of a wrong pronunciation. Examples. *Label*, *labeled*, *labeling*; *libel*, *libeled*, *libeler*, *libeling*, *libelous*; *worship*, *worshiped*, *worshiper*, *worshiping*. So in *cavil*, *cancel*, *travel*.

[*Note.* There are about seventy words of this class, the common spelling of which is wrong. See the words in my Elementary Spelling Book, p. 157, 158.]

When the last consonant is preceded by a digraph, (two vowels, one only being pronounced,) the final consonant is never doubled: as in *conceal*, *concealed*, *concealing*.

Rule 15. The termination *ive*, after a consonant, does not change the original word: as *effect*, *effective*; but after the vowel *e*, this letter is omitted: as in *diffusive*, from *diffuse*, *repulse*, *repulsive*.

Rule 16. The letter *e*, after *bl*, *gl*, *pl*, *tl*, is omitted before *y*; as in *peaceable*, *peaceably*; *single*, *singly*; *ample*, *amply*; *gentle*, *gently*.

Rule 17. The final *e* is omitted before *ly* in *duly*, *truly*; before *ism* in *favoritism*; before *ish*, in *roguish*, *whitish*. When *ism* is added after *c*, the pronunciation of *c* is changed to that of *s*: as in *stoicism*, from *stoic*; and in *catholicism*, from *catholic*.

Rule 18. Nouns take the feminine termination *ess*, in most cases, without any change of spelling: as *heir*, *heiress*; *lion*, *lioness*. But to this rule there are several exceptions: as *actor*, *actress*, instead of *actoress*; *abbot*, *abbess*; *duke*, *duchess*, and others, which are not reducible to rule.

Rule 19. Adjectives ending in *ate*, have corresponding nouns, ending in *acy*, as *effeminate*, *effeminacy*. Some adjectives ending in *ent*, have nouns in *ence*; as *excellent*, *excellence*; others have nouns in *ency*; as *efficient*, *efficiency*; *fluent*, *fluency*. Some nouns ending in *ce*, have adjectives ending in *cious*: as *grace*, *gracious*; *space*, *spacious*. *Abundant* has its corresponding noun, *abundance*, and *redundant* has *redundancy*.

Rule 20. When nouns end in a consonant, the termination *ize*, denoting to *make*, is added without a change of the original word: as *civil civilize*; *moral*, *moralize*; *legal*, *legalize*; *system*, *systemize*. But when the original word ends in a vowel, the letter *t* is inserted before *ize*: as in *dogma*, *dogmatize*; *anathema*, *anathematize*; *stigma*, *stigmatize*. [*Systematize* is wrong, and ought to be rejected.]

Rule 21. The letters in the original word, and in the derivatives, should be the same, unless the pronunciation, for some special reason, requires a difference, as uniformity is a prime rule in orthography. Thus *defense*, *offense*, *expense*, *pretense*, *recompense*, should be written with *s*, for the derivatives are always thus written; as *defensive*, *offensive*, *expensive*, *pretension*, *recompensed*.

Rule 22. As the old orthography of *authour*, *ancestour*, and others, is obsolete, and *u* omitted, all words of similar form should, for the sake of uniformity, and in agreement with the originals, be written without *u*; as *armor*, *candor*, *favor*, *ardor*, *color*, *labor*, *clamor*, *error*, *honor*, *parlor*, *splendor*, *rigor*, *vapor*, *vigor*, *valor*, *inferior*, *interior*, *exterior*, *superior*. This practice is demanded by another reason; some of the derivatives of these words, are never written with *u*: as *laborious*, *invigorate*, *inferiority*.

Rule 23. The double *l* in *befall*, *install*, *inthrall*, *recall*, *forestall*, *miscall*, should be retained in the derivatives; as it is a rule that *a* has its broad sound before *ll*, but not always before a single *l*: *shall* and *mall* are exceptions.

Rule 24. The letter *k* after *c*, is to be omitted in *music*, *public*, and all similar words, unless in *frolick*, *traffick*, whose derivatives, *frolicking*, *trafficked*, require this letter. It seems to be as absurd as unnecessary, to write *musical*, *publication*, without *k*, and *music*, *public*, with it.

Rule 25. The words *connection*, *deflection*, *inflection*, *reflection*, should not be written with *x*, but should follow their verbs, *connect*, *deflect*, *inflect*, *reflect*.

Rule 26. The words *advise*, *comprise*, *devise*, *revise*, *enterprise*, *surprise*, *merchandise*, are written with *s*, in accordance with their French originals.

But the termination, *ize*, from the Latin and Greek, is more correct than *ise*, and it is convenient to retain it in all words in which it has the sense of *make*: as in *legalize*, to make legal; *moralize*, to make moral reflections. The words of this class are numerous.

Rule 27. When the termination, *ly*, is added to a word ending in *ll*, one *l* is omitted: as *full*, *fully*; *squall*, *squally*; *hill*, *hilly*; *still*, *stilly*.

Rule 28. In several derivatives from the Greek, the word *tome* is changed into *tomy*: as in *anatomy*, *bronchotomy*, *lithotomy*, *phlebotomy*. The same change ought to take place in *epitome*, *apotome*, which should be written *epitomy*, *apotomy*.

In like manner, from the Greek *graphe*, we write *geography*, *topography*, *biography*; but from *strophe*, we write *catastrophe*, *antistrophe*; and from *phone*, we write *euphony*, *symphony*; but inconsistently enough, we write *hyperbole*, *syncope*, *synecdoche*. All these, to be regular, ought to end in *y*.

This change, in words thus derived, would not only produce regularity in the singular number, but also in the plural. To make *catastrophe* plural, we must now write *catastrophes*, which is irregular, or *catastrophies*, which is still more irregular. If the singular was written *catastrophy*, then we should form *catastrophies* regularly, as in other words ending in *y*; *glory*, *glories*; *vanity*, *vanities*.

Rule 29. The letter *e*, of the original word, is omitted in *entrance*, from *enter*. So in *cumbrance*, *cumbrous*, *monstrous*, *incumbrance*, *remembrance*, *wondrous*. But *dangerous*, *ponderous*, *slanderous*, retain *e*.

Rule 30. In most words from the French, ending in *re*, these letters have, in English, been transposed. Thus *chartre*, *chambre*, *disastre*, *disordre*, *numbre*, *tigre*, &c., are written in English, *charter*, *chamber*, *disaster*, *disorder*, *number*, *tiger*. In like manner, we ought to write all the like derivatives with the same terminating letters: as *fiber*, *center*, *meter*, *miter*, *niter*, *ocher*, *scepter*, *sepulcher*. *Acre* and *lucre* must be exceptions.

In the derivatives, *e* is omitted: as in *fibril*, *fibrous*, *disastrous*, *central*, *lustrous*, *nitrous*, *sepulchral*.

Rule 31. In the following words, the letter *e* of the original is changed to *i* in the derivatives, as in the Latin: *bitumen*, *bituminous*; *omen*, *ominous*; *stamen*, *stamina*, *staminal*.

Rule 32. The plural of *staff*, should be *staffs*, to distinguish the word from *staves*, a word of different signification. *Stationery*, *confectionery*, should follow *stationer*, *confectioner*, and *coparcenery*, *coparcener*.

Rule 33. As in anglicized words from foreign languages, diphthongs have been generally rejected, as in *economical*, *ecumenical*; it would be proper to extend the practice to other words: as *Cesar*, *Eneid*, *Atheneum*. Diphthongs are troublesome in writing.

Rule 34. Certain gross errors in orthography, however common, ought to be rejected, as they have proceeded from mistakes, or an ignorance of the etymology of the words. Thus, *comptroller*, *furlough*, *redoubt*, *redoubtable*, are, etymologically, nonsense. The true words are *controller*, *furlow*, *redout*, *redoutable*. *Chymistry* and *chemistry*, are both wrong; the genuine word is *chimistry*. *Ton*, a weight, is a gross mistake; confounding the word with the French *ton*, from *tonus*. The English word is *tun*, a cask, which gave us the word when it signifies a weight. And so it was written down to the reign of Henry VIII.

Mould is a wrong spelling; the word is the Saxon, *mold*, as written by Pope, Goldsmith, Hook, and others.

The word *gangue*, in mineralogy, is not only a mistaken orthography, but barbarous. The word is *gang*, in all the languages on the continent, and so it is in English, in common use, and so it is pronounced. In German, ein erzreicher gang; in Danish, mineralisk gang; a metallic vein.

Oxide is a most wanton departure from the original and analogical orthography. The genuine word, as originally and correctly formed, is *oxyd*.

We ought to write *embassador* with *e*, as we do *embassy*; and so it is always written by Blackstone and Coxe.

Calcareous is a wrong spelling. The true spelling is *calcarious*. *Heinous* is a wrong spelling. The true word is *hainous*.

Build should be written, according to the original, *bild*. *Feather* and *leather*, in the original, were written differently; but the most general spelling was *fether*, *lether*, as in German, *feder*, *leder*.

There is an unaccountable disposition in writers, to add *e* final to words, without a show of reason: as in *oxide*, *chlorine*, *deposite*, *reposite*. In many cases, English authors add it to foreign words, which are without it. This is in bad taste. All our efforts should tend to the rejection of useless letters.

EXERCISES IN DERIVATION AND DEFINITION.

The letters denote the parts of speech; *v.* stands for verb; *p.* for participle of the perfect tense; *ppr.* for participle of the present tense; *n.* for noun; *a.* for adjective; *ad.* for adverb.

1.

v. Assess, to value, as property, for taxation; to tax.
p. Assess*ed*, valued, taxed.
ppr. Assess*ing*, valuing, taxing.
n. Assess*ment*, act of setting a value, tax.
n. Assess*or*, one who assesses or taxes.

Rule 1. No alteration of the verb.

2.

v. Attain, to reach, to come to.
a. Attain*able*, that may be reached.
n. Attain*ableness*, state of being attainable.
p. Attain*ed*, reached, come to.
ppr. Attain*ing*, reaching, arriving at.
n. Attain*ment*, a reaching, that which is attained.
} Rule 1.

3.

v. Collect, to gather, to bring together, to assemble.
p. Collect*ed*, gathered, brought together, assembled. Rule 1.
n. Collected*ness*, self-possession. - - - - - - Rule 1.
a. Collect*ible*, that may be collected or gathered. Rule 1.
n. Collect*ion*, act of gathering, assemblage. - - Rule 1.
a. Collect*ive*, formed by collection. - - Rule 1. and 15.
ad. Collect*ively*, in a body, or assemblage. Rule 1. and 2.
n. Collect*or*, one who collects or gathers. - - - Rule 1.
n. Collect*orship*, the office of a collector of customs or taxes. - - - - - - - - Rule 1. and 2.

4.

v. Move, to change place, to stir, to affect, to propose.
a. Mov*able*, that can or may be moved. - - - Rule 11.
n. Mov*ableness*, the capability of being moved - Rule 11.
n. Movables, goods or furniture.
ad. Mov*ably*, so that it can be moved. - - - Rule 16.

5.

v. Abase, to bring low, to humble, as pride.
p. Abas*ed*, brought low, humbled. - - - - - Rule 3.
n. Abase*ment*, the act of abasing, a humbling. - Rule 2.
ppr. Abas*ing*, bringing low, humbling. - - - - Rule 4.

6.

v. Abet, to help, to support, to encourage in a crime. - - - - - - - - - - - - - -
p. Abet*ted*, encouraged, countenanced in a crime. Rule 13.
ppr. Abet*ting*, encouraging, giving aid in crime. Rule 13.
n. Abet*tor*, one who aids or encourages in a crime. Rule 13.

7.

n. Libel, a defamatory writing or publication.
v. Libel, to defame by a writing or publication.
p. *Libeled*, slandered by a writing. - - - - Rule 14.

n. Libel*ant*, one who brings suit in an admiralty court. - - - Rule 14.
n. Libel*er*, one who defames by a writing. - - Rule 14.
ppr. Libel*ing*, defaming by a publication. - - Rule 14.
a. Libel*ous*, defamatory. - - - Rule 14.

8.

n. Worship, religious homage and service.
v. Worship, to adore, to serve in act of religion.
p. Worship*ed*, adored, honored in religion. Rule 1. and 14.
n. Worship*er*, one who pays religious homage. - - - Rule 1. and 14.
a. Worship*ful*, worthy of honor. - - - Rule 1. and 2.
ad. Worship*fully*, with honor or reverence. - - Rule 1.
ppr. Worship*ing*, adoring, serving with reverence. - - - Rule 1. and 13.

9.

v. Gratify, to please, to indulge. - - - - - -
p. Gratifi*ed*, pleased, indulged. - - - Rule 5.
n. Gratifi*cation*, act of pleasing or indulging. - Rule 10.
ppr. Gratify*ing*, pleasing, indulging. - - - Rule 5.

10.

v. Annoy, to incommode, to molest.
n. Annoy*ance*, trouble, molestation. - - - Rule 7.
p. Annoy*ed*, injured, molested. - - - Rule 7.
n. Annoy*er*, one who incommodes or molests. - Rule 7.
ppr. Annoy*ing*, incommoding, troubling. - - - Rule 7.

So alloy, employ, destroy; delay, essay, defray, convey, survey; endow, bestow, allow.

RULES FOR THE USE OF CAPITAL LETTERS IN WRITING AND PRINTING.

Begin with a capital, the following words.

1. Names of persons; that is, proper names; as George, Henry, William, Rebekah, Emily. This rule extends to all the names, surnames, and baptismal names.

2. Names of nations, and tribes of men; as Americans, English, French, Germans, Creeks.

3. Names of the quarters or great divisions of the globe; as, Europe, Asia, Africa, America; also their adjectives, European, Asiatic, African, American.

4. Names of countries, empires, kingdoms, states, and their adjectives: as Britain, British; Scotland, Scottish; also adjectives which are a part of the name: as Great Britain, North America.

5. Names of the principal divisions of a kingdom or state; provinces, departments, counties, precincts: as Suffolk, Norwich, Oneida, Lancaster.

6. Names of cities, towns, and villages: as Washington, London, Paris, Hartford, Albany.

7. Names of parishes, ecclesiastical societies, wards, and other similar divisions.

8. Names of religious sects, and churches: as Episcopalians, Presbyterians, Congregationalists, Lutherans, Calvinists, Arians.

9. Names of assemblies, councils, courts, associations, synods.

10. Names of rivers and lakes: as Mississippi, Ohio, Delaware, Erie, Huron.

11. Names of oceans and seas: as Pacific, Atlantic, Baltic.

12. Names of mountains: as Andes, Alps, Allegany, Hermon; and adjectives, when a part of the name: as Green Mountains, White Mountains.

13. Names of isles: as Great Britain, Ireland, Jamaica, Cuba.

14. Names of capes and promontories: as Cape Hatteras, Cape Cod.

15. Names of universities, colleges, churches, and other public edifices: as Oxford, Cambridge, Harvard, Yale, Trinity.

16. Names of books of distinction: as Bible, Polyglot, Encyclopedia.

17. Names of poems of celebrity: as Iliad, Eneid, Paradise Lost.

18. Names of arts and sciences, used as titles: as Astronomy, Algebra, Mathematics, Geology.

19. Names of languages: as Hebrew, Greek, Latin, English.

20. Titles of books: as History of England, Life of Washington.

21. Titles of chapters, sections, and similar divisions of a treatise.

22. Names of the books of the Old and New Testament.

23. Names of the months, and days of the week: as January, Monday; and among the Quakers, First day, Second day.

24. Orders of men: as Knights of Malta, Friars, Jesuits.

25. Names or titles of Literary Societies: as Royal Society, Academy of Sciences or of Arts, Philosophical or Historical Society.

26. Names of feasts: as Passover, Easter.

27. Titles of nobility in official papers: as Duke, Marquis; and always the titles of address, Sir, Monsieur, Don, Messieurs, Madam, Miss, and the like.

28. Names of the houses or branches of government: as Senate, House of Representatives, House of Lords, Chamber of Peers; also, names of the departments of government, and the heads of the departments: as Treasury, and Secretary of the Treasury, and of the State, of War, &c.

29. Titles of public officers: as Emperor, King, President, Admiral, General, Stadtholder, Burgomaster; and in official papers, Pope, Cardinal, Archbishop, Bishop, High Priest, Chief Justice.

30. Titles of incorporated societies and companies: as Mayor, Aldermen, and Common Council; President and directors of a bank; and the names of banks: as Hartford Bank, New Haven Bank.

31. Names of ships, public and private: as Philadelphia, Delaware.

32. Names of the signs of the Zodiac, and of the constellations and planets: as Aries, Taurus, Orion, Uranus, Jupiter, Mars; also names of the great circles, when used as titles: as Meridian.

33. Honorary titles: as Bachelor of Arts, Doctor of Divinity.

34. Epithets of distinction: as Alexander the Great, Edward the Confessor.

35. Names of orders, classes, genera, and species of animals and plants.

36. Names of the orders in Architecture: as Doric, Ionic, Corinthian.

37. Names and titles of the Supreme Being: as Jehovah, God, Lord.

38. Names and titles of the Savior: as Christ, Jesus, Redeemer; also the Christian Religion, and other religions: as Mohammedan.

39. The first word in every chapter and verse in the Bible; in every sentence in prose, and every verse and stanza in poetry; also of every book or treatise.

40. The first word in every passage quoted in writings.

41. The first word in all orders and commands of a superior.

42. The first word in laws and resolves of a public body.

43. Title and addresses in letters.

44. Letters used as abbreviations: as A. D., A. M., P. M.

45. Points of the compass: as North, South, North East, South West, South East, South by West.

46. Names of epochs and eras: as Julian Period, Indiction, Hegira, Christian Era.

47. Names of heathen deities: as Apollo, Venus, Jupiter, Mars.

48. The pronoun I, and the exclamation O, or Oh.

CHAPTER XIII.

A SPECIMEN OF DEFINITIONS.

ABAN'DON, a *verb*, signifies, not merely to *leave*, for one may leave a place for an hour or a day, but to quit, desert, or forsake, with a view never to return to the place or practice left. The first duty of every person is to *abandon* vice.

Abbre'viate, a *verb*, signifies to make shorter, to abridge; but it is applied chiefly to writings or words; as to abbreviate a discourse, or to abbreviate words by omitting a letter or a syllable. We never say, to *abbreviate* a rope or a piece of timber.

Abbreviation, *n*, is the act of shortening, as a word.

Abbreviator, *n.* one who shortens words.

Abdicate, *v.* signifies to abandon or renounce, as an office, without the usual forms of resigning it to him or them who conferred it. Thus it differs from *resign*, which is to give up power or an office, by sending back a commission to him or them who conferred it. King James *abdicated* the throne or kingly power, and left the kingdom of Great Britain, without resigning his power, or office. General Washington, at the end of the war, repaired to Congress, in Annapolis, and gave back his commission to Congress, who had given it to him. This was *resignation*.

Abet, *v.* signifies to assist or encourage one in the commission of a crime. We never say to *abet* one who is building, or making hay. We may aid or assist him, but this is not *abetting* him.

Abhor, *v.* signifies to hate to the utmost degree. *Detest* and *abominate* express nearly the same idea.

Abhorrence, *n.* is extreme hatred; detestation.

Abhorrent, *a.* signifies detesting; but more generally, it denotes extreme opposition, or contrariety; as, cruelty to beasts is *abhorrent* to the feelings of humanity.

Abide, *v.* signifies to stay, lodge, dwell, or remain for some time. To *abide by*, is to adhere to, to stand firm, as to *abide by* a friend, or to maintain, or not to abandon, as to *abide by* a promise.

Able, *a.* signifies having strength, or power, sufficient for a purpose, and it is applied to physical strength or power, as of the body; as, a man is *able* to lift a bar of iron. It is applied also to moral power, or the power of the mind; as, a man is *able* to read Livy, or to defend a cause in court. It signifies, also, having sufficient means or property; as, a man is *able* to build a ship, or to pay his debts. It sometimes denotes having superior powers of intellect; we say, a man is a very *able* judge.

Abil′ity, *n.* signifies powers of body or mind, natural or acquired. It differs from *capacity.* Ability is active power, the power to act, do, or perform; *capacity* is the power to receive. A man has *ability* to perform service; he has *capacity* to understand or to receive ideas. Ability signifies, also, means, or sufficient property; as, *ability* to supply the wants of others. It signifies, also, legal power or right, as an *ability* to sell an estate; a minor, a person under age, has not the *ability* to sell property or to make a contract.

Abscond′, *v.* signifies to withdraw from public notice. A man may *abscond* by quitting a town or country, or by concealing himself from the world in his own house.

Acqui′re, *v.* differs from *gain* in its application. It signifies, to gain something permanent, as to *acquire* riches, or a title to land. We may *gain* time by delay, but we do not *acquire* it. We gain sight of an object, but we do not *acquire* it.

Accept′, *v.* signifies to receive with favor. It differs from *receive;* for a man may receive an appointment or a commission, which he does not *accept.*

Acquit′, *v.* signifies to clear or free from a charge, accusation, or guilt. If a criminal is on trial for a crime, when the jury, by their verdict, pronounce him not guilty, he is *acquitted.*

Acquittance, *n.* is a discharge from an accusation; it is also a receipt in full of a debt, which discharges the debtor.

Address′, *v.* signifies to speak to or to write to; we *address* prayers or petitions; we *address* letters or speeches to others; the merchant who directs or consigns goods to an agent, is said to *address* them; and a man, in making love to a lady, *addresses* her.

Address′, *n.* signifies a speech, argument, or oration, directed to others; also the direction of a letter, and the title, name, and place of abode of a person; as when we say to a person, please to give me your *address*. This word signifies, also, skill, tact, or dexterity in the management of a plan or argument, to obtain something; as, to use *address* in making a treaty.

Administer, *v.* has several uses. To *administer* government, is to execute the laws, as a chief magistrate, King, President or Governor. To *administer* on an estate, is to collect debts due to it, pay debts due from it, and divide the property among heirs and legatees. To *administer* medicines, is to give medicines, or direct what a sick patient is to take to cure his disease.

Administra′tor, *n.*; this is a person who administers; but the word is chiefly used for one who is appointed by a judge or court to settle an intestate estate. An administrator differs from an executor chiefly in this; an *executor* is appointed by the will of the owner of property; and an *administrator* is a person appointed by a judge, or court, to settle an estate, when the owner has left no will. In this case, an estate is called *intestate.*

Administrator, *n,* is a man who settles an estate.

Administratrix, *n.* is a woman who settles an estate.

Admit′, *v.*; this signifies to allow or grant; as when we *admit* the truth of a proposition or argument; also, to suffer to pass or to enter into a place; as to *admit* one to enter a house.

Admis′sible, *a.* signifies, that may be admitted, either in fact, or law, or with propriety.

Admissibil′ity, *n.* is the quality of being admissible.

Admis′sion, *n.* is the act of admitting, allowing, or granting.

Admit′tance, *n.* is the act of permitting a person to enter a place. Sometimes it signifies, the power or right of being admitted. But we never say, the *admittance* of truth or of a proposition; *admittance* is used for *persons.*

Adore, *v.* signifies to give reverence and honor to the divine Being, to worship with reverence. This word is to be used only in reference to the Supreme God. We ought not to use it with reference to any inferior being.

Advance, *n.* is a moving forward; also, promotion to a higher state or office; also a first proposal, as when one makes an *advance* toward reconciliation of enemies. *Advance*, or more generally *advances*, in the plural, is used for supplies of money on credit, or as part of a fund.

Advance, *v.* signifies to move forward, as an army or fleet advances; but in this sense it is seldom applied to a single person; at least it appears like affectation to say a man *advanced* from New York to Philadelphia. It signifies, also, to raise, promote, or exalt, as to *advance* a man to an office. It signifies, also, to supply money on credit, or to promote an object.

Affect′, *v.* signifies to move the passions, or to make some impression on sensibility. A person is *affected* by sorrow, or by sympathy. It signifies, also, to make impression on one's estate or interest. A fall in the price of goods, *affects* the interest of a merchant. *Affect* signifies, also, to make an effort, or to attempt something that is not natural; as to *affect* to imitate another; to *affect* uncommon civility; to *affect* to be pleased.

Affecta′tion, *n.* is an attempt to do or assume what is not natural; a false pretense; as the *affectation* of learning or wit.

Ache, pain, agony, anguish, *n.* *Ache*, *aching*, is pain, but it is usually applied to pain of some continuance, as *head-ache*, *tooth-ache*. *Pain* is a general term to express distress. *Agony* denotes extreme pain, such as occasions a writhing of the body. *Anguish* is used to express extreme pain either of body or mind.

Ag′gravate, *v.* signifies to increase or to make worse, as an evil; as to *aggravate* grief, pain, calamity, or the hainousness of a crime. It is sometimes used to express exaggeration of what is not an evil; as to *aggravate* a description. This is less proper.

Alle′viate, *v.* this is the opposite of *aggravate*, and signifies to make lighter, as evils; as to *alleviate* pain, grief, sorrow, or other evil. (The primary sense of *aggravate*, is to make heavy; and that of *alleviate* is to make light in weight; yet these words are not used in a literal sense, but in a fig-

tive sense only. We never say, to *aggravate* a load of
eat or hay, or to *alleviate* the weight of a load.)

v. signifies to make some difference in a thing, or some
inge, without destroying the thing; as to *alter* a garment,
t it is, in some cases, used to denote an entire change,
to *alter* an opinion. In this sense it is synonymous with
nge. The latter word is generally to put one thing in
place of another, or to take one thing for another.

, *v.* signifies to attempt to draw to, by something invi-
, generally in a good sense, as to *allure* one to the
ctice of virtue. But it is used, also, in a bad sense; as
llure one to transgress a law. *Entice* is a word of like
nification, but more commonly used in a bad sense, as to
ice one to the gaming table.

unce, *v.* signifies to give the first public notice of a thing,
to *announce* the arrival of an embassador. *Denounce*
nifies to utter a threat, or an evil, as, Deuteronomy xxx.
" I *denounce* to you this day, that ye shall surely perish."
nounce implies that the thing denounced is an evil, or
nething wrong or disapproved. Hence the improper use
the word in the Declaration of Independence: "We
st acquiesce in the necessity, which *denounces* our sepa-
ion." If this word was used as the threatening of an
l to Great Britain, the use of it is proper; if it was to
claim a good to this country, it is improper.

l, *v.* signifies to make void and of no effect, as a law,
eement, or contract. To repeal a law is to *annul* it.
nce *disannul* is wholly an improper word, and ought
er to be used.

se, *v.* to inform or to give notice to, is a word that has
connection with

ze, *v.* to value by authority, and therefore the spelling
uld be different.

ve, *v.* signifies to like, or assent to the propriety of.
t

bate, *v.* signifies to express approval or approbation.
probate is probably of American origin; but well author-
d.)

gn, *v.* is to bring a person before a court and present an
usation against him in a formal manner, for any crime
atever. It therefore differs from *accuse*, which is to
rge a person with wrong in any place or manner. It

differs also from *impeach*, which, in law, is to accuse in a formal manner before a tribunal, for some malpractice in an office.

Assign, *v.* signifies to give or declare, as to *assign* reasons for an action; also to make over or transfer, as to *assign* a note to another by indorsement, or the writing of the holder's name on the back of it: also to *appoint*, as to *assign* to one his task.

Assigner, or assignor, *n.* is the person who transfers; and

Assignee′, *n.* is the person to whom a thing is transferred.

Assu′re, *v.* is to make sure or certain, as to *assure* a person of the truth of an event; also to secure against loss, like *insure*.

Assurance, *n.* is the act of making sure, and of insuring against loss; also great boldness of manners, a degree of boldness and confidence, which is not consistent with decorum.

Avarice, *n.* is an extreme love of money or property, which makes a person eager to gain and hoard. *Covetousness* is an excessive eagerness to gain and *keep* property, and hence a reluctance to bestow charity. *Niggardliness* is extreme covetousness, even to meanness, in expenses and in withholding gifts. These all differ from *frugality*, which is a prudent saving of money and expenses; and from *economy*, which is a prudent use of money in expenditures.

Avoid, *v.* is to shun. It differs from *escape*, as it generally implies a *design* to shun; whereas a person may *escape* an evil without design. *Avoid*, in *law*, signifies to make void.

Banish, *v.* signifies to drive from a place or country by law or authority; hence, to drive away; as to *banish* care. A banished person is an exile. A person is sometimes said to be banished from a place by necessity of circumstances; but it is not strictly correct to say a man *banishes* himself. Yet custom authorizes the use of *voluntary* banishment; that is, a total forsaking of one's country by choice.

Beauteous, *a.* implies more than *handsome*.

Brave, *a.* signifies courageous, daring to meet danger.

Bravery, *n.* is courage to encounter danger with firmness; *intrepidity* is fearless courage; but *fortitude* is the firmness which endures pain and calamity without shrinking and murmuring.

Bliss, *n.* is the highest degree of happiness. The order of words, as to degree, is, *happiness*, *felicity*, *bliss*.

Chart, *n.* is a representation of the sea or sea coast, and the isles, bays, estuaries, and harbors. Hence it differs from *map*, which is a delineation of places on land.

Cheerfulness, *n.* expresses a more moderate liveliness or excitement than *gayety* or *mirth*. A person may be *cheerful* without being *merry*.

Competence, *n.* is sufficiency, as of property or income; that which is necessary for subsistence. It signifies, also, legal fitness or qualifications; as *competence* for an office.

Competent, *a.* signifies sufficient, adequate to wants; as a *competent* income. It signifies, also, fitness, adequate ability or legal qualifications, as *competent* to fill an office; a *competent* witness.

Consign, *v.* signifies to send and intrust to another. A merchant consigns goods to a factor for sale. It signifies, also, to deliver, as to *consign* a body to the grave.

Consigner, consignor, *n.* is the person who consigns any thing to another; and

Consignee, *n.* is the person to whom a thing is intrusted for sale.

Consignment, *n.* is the act of consigning, or the thing consigned.

Constrain, *v.* is to oblige a person to do something by moral considerations, as well as by force. It thus differs from *compel*, which implies physical force.

Consent′, *n.* differs from *assent*. *Assent* is the act of the will, agreeing to a truth, statement, or proposition. *Consent* is the act of the will, agreeing to something which affects the interest. We *assent* to the proposition of another; we *consent* to the marriage of a daughter, or to the sale of property.

Convoy, *n.* is a protecting force accompanying property passing by sea or land. The ships protected and the protecting ships, are both called a *convoy*. When a person is to be protected, *escort* is the word used for the protecting force.

Custom, *n.* is habitual practice; *practice* is the act of doing; and *habit* is the effect of *practice*: that state or disposition of body or mind, which is produced by frequent or repeated acts.

Deba′se, *v.* signifies to lower, or make worse in quality. It differs from *abase.* The latter is most applicable to pride, or an exalted condition; but *debase* signifies to lower character and worth, and to incur ignominy. Hence it differs from *degrade,* which is to lower in rank.

Deba′te and **dispu′te,** *v.* have nearly the same signification, but the use of them is somewhat different. *Dispute* is used for an arguing between individuals, or private persons; *debate* is the arguing or discussion of questions in a public body, as in congress, or in a legislature.

Decoc′tion, *n.* is properly a boiling; but it is used generally for a liquor in which some herb has been boiled, and which contains the qualities of the herb.

Decompo′se, *v.* signifies to separate the constituent parts, or elements, of a body. It differs from *dissolve,* which signifies to melt, to change from a solid to a liquid state, without a change of the qualities of the substance. But to *decompose* is to separate elements united by affinity, which process changes the qualities of a body. Thus, *sugar* is *dissolved* in water, but the qualities of the sugar are not altered; but when the water is *decomposed,* the products are oxygen and hydrogen, two gases having qualities directly opposite to that of water. Water extinguishes fire; but oxygen is that which supports combustion, and hydrogen is one of the most inflammable substances in nature.

Decompound, *v.* is generally used to signify, to compound a second time; to unite something with a substance already a compound.

Deference, *n.* differs from *obsequiousness.* Deference is a proper and respectful submission to the authority or opinions of a superior. *Obsequiousness* conveys the idea of mean submission.

Deflagrate, *v.* signifies to burn, but not as common fuel. It denotes the sudden combustion of very inflammable substances, as oil, or spirit.

Delinquency, *n.* has the general sense of *failure* in the performance of duty; but in its appropriate sense, it is the failure of a public officer to discharge his duties.

Deliquesce, *v.* signifies to become soft, or liquid, by absorbing moisture from the air. It is not used to denote melting by fire.

Demand, *v.* This is not synonymous with *ask*, *petition*, and *supplicate*. Demand implies a *right*, or *claim*, in the person asking; as to *demand* payment of a debt when due. *Ask* and *petition* imply no such *right*, but they are used to obtain a *favor*. Many errors are committed in the use of this word, which are owing to the French sense of the word. When it is said, "a king *demands* a daughter of another prince, in marriage," the language is not correct, but insolent. No human being can *demand* any thing of God.

Dense, *v.* is not always synonymous with *thick*. *Density* is the closeness, or compactness, of the parts of a substance, but *thickness* may express dimension, as the *thickness* of a board or plank.

Destitute, *a.* differs from *deprived*. The latter word implies that a person has lost what he once possessed; *destitute* does not. A person may be *destitute* of what he never possessed. Writers often err in confounding these words.

Diffuse, *v.* differs from *disperse*, *dissipate*, and *scatter*. A substance may be widely spread, without being *dispersed*, *dissipated*, or *scattered*; the latter words may signify to *separate* the parts of a substance.

Dilate, *v.* is not synonymous with *extend*. *Dilate* signifies to extend in all directions; as the lungs in breathing, or the air by rarefaction; *extend* may be applied to any line or surface. A line is extended; territory is extended. *Expand* is more nearly synonymous with *dilate* than *extend*; but *expand* is applied also to *opening*; as a flower *expands*.

Disability, *n.* like *inability*, denotes want of ability; but *disability* proceeds from *deprivation of ability*; whereas, *inability* does not. The prefix *dis*, denotes separation, and thus may imply deprivation. *Disability* to walk, may proceed from a broken leg, but *inability* may proceed from the natural want of a leg.

Discon'nect'ed, *p.* differs from *unconnected*. *Unconnected* is used of things which may have never been connected; but *disconnected* implies that the things spoken of, have been connected.

Disengaged, *p.* as in the word above, is used of persons that have been engaged; but *unengaged* may be used of persons who have not been engaged. This distinction is to be observed in many other words.

Distend, *v.* differs from *extend*, in expressing enlargement in every direction, and is nearly synonymous with *dilate;* which see.

Dread, *n.* expresses great fear; and *terror*, the utmost degree of fear. These differ from *fright*, which signifies great fear or terror, suddenly impressed or excited.

Efface. *v.* differs from *deface.* To *efface*, is to blot out, erase, or destroy entirely; as to *efface* a writing. To *deface*, is to impair the form or exterior surface of a thing, but not to destroy entirely.

Effervesce, *v.* denotes to boil gently, and throw out an elastic gas, as cider, when it is working; that is, fermenting.

Embez′zle, *v.* This is not to steal; but to appropriate to one's own use, property intrusted to one's care.

Evacuate, *v.* signifies to empty and make void; but it is not used in regard to small places. We do not say to *evacuate* a house; but the British troops *evacuated* New York, when they left it.

Expectancy, *n.* This word is used in law only, denoting the condition of an estate, which is not to take effect until another estate is determined: as a *remainder*, or *reversion.* In this case, the estate, as it were, *waits* for another estate to end.

Flow, *v.* as a liquid. This differs from *run;* a horse or a man *runs*, but he does not *flow.* *Run* is a word of general signification, applicable to animals, and to water and other things; but *flow* is applicable to substances which are fluid, or whose particles are loose and movable. In flowing, the particles change places; but a solid body may *run.*

Habit, see *custom.*

Hope, *n.* This implies desire, with some ground to expect the thing desired. In this it differs from *wish*, which implies no expectation.

Horror, *n.* This word signifies great dread, with a mixture of hatred, or abhorrence.

House-breaking, *n.* differs from burglary; the latter is committed in the night; house-breaking in day-light. Both imply stealing, or an intention to steal.

Kill, *v.* is a word of general signification; it is to destroy life in any manner. To *slay*, is to kill by striking, or by other forcible means.

Labor, *n.* differs from work, as it implies toil, or difficulty. *Work* does not. A machine *works* well; a ship *labors* in a tempest; a man *labors* in the field.

Monop′oly, *n.* This word signifies the sole right of buying and selling, or of transacting a particular business, vested in an individual, or company, in a particular country, state, or district. If there are two or more individuals, or companies, in the same country, state, or district, which have a similar right, neither of them has a monopoly.

Moor, *v.* A ship is not moored by a single anchor.

Mutiny, *n.* Mutiny differs from sedition, and still more from insurrection. Mutiny is the rising of soldiers in the army, or of sailors in a ship, in resistance of the commander. *Sedition* is insubordination, or tumultuous opposition to law, in a town, city, or community. *Insurrection* is a rising of people to resist law in a state. *Rebellion* is open resistance of law, and an attempt to withdraw from a government. *Revolt* is also a renunciation of the authority of a government.

Permeable, *a.* signifies that may be passed through the pores.

Per′meate, *v.* to pass through the pores of a substance.

Practicable, *a.* differs from *possible*. *Possible* signifies that can be done, or happen, by any means. *Practicable* signifies that may be done by the means in our power.

Thaw, *v.* to melt, as snow or ice. It is used only to express the melting of frost, or something congealed by cold. We never say to *thaw* sugar or lead.

Theft, *n.* a stealing. This signifies the taking of the property of another secretly, and with a felonious intent. It differs from *robbery*, which is the taking of property from a person by force.

Translucent, *a.* transmitting rays of light imperfectly. It differs from *transparent*, which signifies transmitting rays of light perfectly, or without intercepting any part of them.

Testimony, *n.* The declaration of a witness; this furnishes evidence. A witness testifies; what he declares under oath, is *testimony*; and *evidence* is the effect of that *testimony*, in proving facts, or the truth.

Verity, *n.* is truth.

Veracity, *n.* is the habitual observance of truth, or the disposition to speak truth. *Veracity* belongs to the character of persons.

CHAPTER XIV.

ILLUSTRATIONS OF GRAMMAR.

Language, the subject of grammar, is the instrument by which men have intercourse with each other, in the mutual communication of ideas.

Language consists of words, which, by common usage, are the signs of ideas or thoughts. Words consist of sounds, uttered by the human voice; or they are represented by characters, written or engraved on material substances.

The grammar of a language explains the principles on which that language is constructed, classifies the words, and directs how they shall be formed and arranged in sentences, both in speaking and writing.

Two persons, in order to understand each other in the communication of thoughts, must annex the same idea to the same word. For this purpose, things which exist, and about which they converse, must have names; and those who intend to impart ideas to each other, must give the same name to the same thing.

Material substances, and things that exist, must have names; their qualities must have names; actions of all kinds must have names, and persons must have names.

The name of a thing, of a quality, or of an action, is that sound, or combination of sounds, by which men agree to express the idea of that thing, quality, or action. Names of persons are arbitrary; they are the sounds by which the person is known. They are given, assumed, and changed at pleasure, and therefore are no part of the common language.

A name of any thing material, or which conveys a distinct idea, without the aid of any other word, is usually called, in grammar, a *noun*, from the Latin, *nomen*, name.

When there is but one thing of the sort, its name expresses that thing only. Thus *Vermont*, is the name of a state, and there is but one state bearing that name. *Vermont*, then, is a *proper* noun; that is, *appropriate* to that state, and applicable to nothing else.

Proper nouns, then, are the names of persons, kingdoms, states, rivers, lakes, and the like, of which there is but one bearing that name: as New York, Philadelphia, London, Paris, Mississippi, Potowmac, Hudson, Merrimac, Kennebec, France, England, Austria, Ontario, Erie, Huron.

The names of persons are *proper names*; for although many persons have the same name, yet there is no class, species, or kind, bearing the name.

When there are many things of one species, or kind; that is, having the like form, or properties, a name is given to the species, or kind. Thus, a plant of a certain form, with a stem, root, and branches, having a general resemblance, is called a *tree*, which is a generic name, that which is applied to the whole genus. A species of tree with a certain form and properties, is called an *oak*; another species is called *pine*.

This mode of giving names to species, kinds, and classes, prevents the necessity of giving a separate name to every tree, which would be impossible.

Names of this sort are called *common* nouns; nouns which are common to whole species and genera. In like manner, horse, ox, sheep, dog, are common nouns, as they are applicable, each to a species, or genus of animals.

In speaking of things, we have need of a word to express one thing, or more than one. The mode by which, in English, a word expressing one thing, is altered to express two or more, is, in general, to add the letter *s*, or the letters *es*, to that word; as *tree*, *trees*; *book*, *books*; *page*, *pages*; *brush*, *brushes*; *box*, *boxes*; *church*, *churches*. There are some exceptions; as *man*, *men*; *woman*, *women*; *ox*, *oxen*; *mouse*, *mice*. These are irregular, and are to be learned as exceptions.

A word expressing one thing, is said to be in the *singular* number; a word expressing two or more things, is said to be in the *plural* number. There are, then, two numbers.

A common noun, in the singular number, is usually preceded by the word *an* or *a*. This, in our mother tongue, the Saxon, is the same word as the Latin, *unus*; the Belgic, *een*; the German, *ein*; and the French, *un*; which, by alteration, is our present *one*. We say *an* ox, *an* owl, *an* ounce, *an* egg; that is, *one*. For the ease of pronunciation, this *an* loses the *n* before a consonant: as *a* pen, *a* tree, *a* farm; also *a* should be used before *y* consonant, and before *u*, when pronounced *yu*, as in *unit*. We use *an*, before a silent *h*: as *an* honor; but when the accent of a word beginning with *h*, not silent, is on the second syllable, ease of enunciation seems to require *an*; as *an* historian, *an* herbivorous animal. Hence, we should say, *a* hex′agon; but *an* hexag′onal figure.

An, or *a*, is an adjective of number, signifying *one*, and used indifferently before any *noun*, definite, or indefinite.*

Pronouns are words used instead of names, or nouns, to express persons. Of these, there are three in each number;

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* In the grammars of the English language, there has been, and still is, a continued series of errors on the subject of this word, *an*. These grammars tell us that *a* is an indefinite article, *prefixed* to nouns, and used to point out a single thing of the kind, in a vague sense, indeterminate, or not pointing to a thing certain: as, "give me *a* book; that is, any book." So ignorant were the first compilers of English grammar, of the origin of this word, that they considered *a* the original word, and that *n* was added before a vowel,—a thing that has never been done in any instance in the language. All this is a mistake.

In the first place, *an*, or *a*, is never *prefixed* to a noun. A *prefix* is united with a word, forming a part of it, which is never the case with *an*, or its abbreviation *a*; or a prefix is a part of a title: as in St. John.

In the second place, *an* is the original word, and *a* is used in the place of it, before a consonant. Its only use is to express *one*, and that without the least reference to the definiteness or indefiniteness of the noun to which it relates. It is used before *definite*, or *indefinite* words, just as *two*, *three*, *four*, and every adjective of number, is used.

The example given above is correct. "Give me *a* book," that is, *one*, or *any* book. Just so is *two* used. "Give me *two* books," that is, *any two*. "Give me *three* books," that is, *any three*. From a basket of oranges, "bring me *an* orange," that is, *any orange*. "Bring me *two* oranges," that is, *any two*. "Bring me *ten* oranges," that is, *any ten*; and so onward to a thousand, or to any other number. The word *an*, or *a*, in this respect, stands on precisely the same footing as every adjective of numbers in the language.

But let other cases be cited. Congress consists of two houses, *a* senate, and *a* house of representatives; that is, according to the foregoing definition, *any senate*, indeterminate, or in a vague sense; and *any house* of representatives, uncertain which, but one of a number.

New York stands on an island: that is, on *any island*, indeterminate.

"I will be to them *a* God, and they shall be to me *a* people." Heb. viii. 10. That is, I will be to them *any God*, in a vague sense, indeterminate; one God of a number, but uncertain which. They shall be to me *a* people, that is, *any people*, indeterminate.

Who is not surprised, that such a false definition and classification of this word, should keep its place in a grammar, and be taught to children, age after age; and at this day, boldly defended by nearly every compiler who treats of the subject?

This, however, is the fact, not only in English grammar, but in French, *Italian*, German, and other languages.

in the singular, 1, *I.* 2, *thou*, or *you.* 3, *he*, *she*, or *it.* The person speaking, or writing, calls himself *I;* the person addressed, is called *thou*, in sacred style, and *you*, in common language; the person of whom one speaks, is called *he* or *she;* and if a thing, *it.*

In the plural number, when a person speaks of two or more, including himself, he uses *we.* When he addresses two or more, he calls them *you* or *ye.* When he speaks of two or more, not addressing them, he calls them *they.*

Nouns and pronouns have *cases.* This word, in grammar, signifies a state, or position.

Nouns have only one use, or position, which requires a different ending. This is when we speak of *having*, or *possessing* something. Thus, when we mean to say that a book belongs to John, we say John's book. The word *John's* is here in a case called *possessive*, and this is formed by the addition of the letter *s*, with a comma. After *ss*, the comma is added, but not the *s:* as, for goodness' sake; and also after a single *s*, when the pronunciation requires no additional syllable: as, on eagles' wings. If the pronunciation of the word requires an additional syllable, the *s* is added: as, Thomas's book.

When a noun or pronoun expresses the agent that does an act, we say it is in the *nominative* case: as, I go, you walk, he rides. Here *I*, *you*, and *he*, are in the nominative case, before the verbs.

But when a noun or pronoun expresses a person, or thing, which rceives an action, or is affected by it, it follows the verb, and is said to be in the *objective* case: as, I see *him*, you see *me*, he sees *you.* In the plural, we see *them*, they see *us*, you see the *clouds.*

Hence we observe, that there are in English three *cases*, the *nominative*, *possessive*, and *objective.* But nouns are the same in the nominative and objective cases. We say, a *man* sees us, or we see the *man.* The pronouns only are varied in the cases.

There are two *genders* in grammar, expressing different sexes, the *masculine* and the *feminine.* The masculine denotes a male; the feminine, a female. The general rule for forming the feminine gender, is to add an *ess* to a noun expressing the masculine gender: as, *lion*, *lioness*, *heir*, *heiress.* But in some words, a letter is lost in the feminine: as in *actress*, instead of *actoress.* Some feminine nouns end in *ix:*

as, *executrix* from *executor;* and others deviate from these rules, as *abbess* from *abbot.* Nouns which are neither masculine nor feminine are called *neuter.* Such are the names of natural objects without sex or life; as, *tree, cloud, rain.*

The qualities of things require names; as, *white, red, blue, good, bad.* The words expressing qualities, either inherent in things, or ascribed to them, are called *adjectives;* that is, words added, or that may be added. These words must always be used in reference to some thing expressed by a noun; as *white* paper; *black* ink; a *high* mountain; a low valley; a *cold* or *warm* day; a *fair* woman; a *generous* or *faithful* friend.

Of qualities there are different degrees. When we speak of a quality without comparing it with another, we call it *positive,* as *bright, firm, weak.* When we speak of a quality as greater or less than another, we add *r* or *er* to the word, as *brighter, firmer, weaker, whiter.* When we intend to express the utmost degree of a quality, we add to the word *est,* or *st;* as *brightest, firmest, weakest, whitest.*

If we mean to express a moderate degree of a quality, we add *ish* to the word; as *whitish, yellowish.*

When adjectives have many syllables, the terminations *er* and *est* would often render the pronunciation difficult; for which reason, we express the degrees of comparison by using *more* and *most* before them; as *more* generous, *most* benevolent.

The degrees of comparison then are *three,* the *positive, comparative,* and *superlative.* But it might be more correct to say there are *four* degrees, an imperfect or moderate degree being expressed by the termination *ish;* thus, *whitish, white, whiter, whitest.*

Those words which express action or being, or which affirm some thing, are called *verbs;* that is, *words* by eminence; for the verb is the principal source of all other words.

Verbs may be arranged in two classes; one containing such verbs as express an action that produces some effect on a person or thing, or whose action is directed to, or which terminates on an object.

When we say a man *writes* a *letter,* we observe, that the act of *writing* produces a *letter.* But when we say, a man *loves virtue,* the act of loving is directed to that object, or terminates on it. So when we *see the stars,* the act of seeing is directed to the *stars* and terminates on them.

This sort of verbs is called *transitive*, which signifies *passing*, as the act expressed by the verb passes to the object, or is directed to it.

When a verb expresses an action performed by an agent, without affecting any object, or being directed toward it, the verb is called *intransitive;* as, a man *runs*, or *sleeps*, or *walks*, or *sits;* the bird *flies;* the child *cries* or *laughs;* the sun *shines*.

When we state that a person or thing is affected by another person or thing, we use the substantive verb, *to be*, with a participle of the perfect tense; as, John *is esteemed* by his friends; a *lady is admired* by her acquaintances.

This is the *passive form* of English verbs, answering to the passive verb in other languages.

There is one verb of most extensive use, which is often called the *substantive verb*, as it denotes *being* or *existing* in some state or manner. This, in English, is the verb *to be*, which has various inflections; as, I am, you are, he is, we are, ye are, they are; I was, thou wast, he was; we, you, they were. This verb is always used in the passive form of English verbs.

Actions are performed, and things happen at different times; they may be now doing; they may have been done at a former time; they will be done in some future time. I see the sun now; I saw it yesterday; I shall see it to-morrow. These different times of an action require to be expressed by different forms of the verb. These forms are called *tenses*.

In English, there are twelve tenses; that is, different forms of the verb, or different combinations of words to express the time when an action is performed.

1. The present tense, indefinite, which denotes present action, or being; as, I now *write;* or that which exists at all times; as, the sun *is* a splendid body; or it expresses a general truth, or a permanent habit or quality; as, men *are* mortal; virtue *is* laudable; plants *grow* from the earth; birds *fly;* fishes *swim*.

2. Present tense, definite; that is, expressing the true or certain time of action or being; as, I *am reading*.

3. Past tense, indefinite; expressing time past; as, the ark *floated* on the water.

4. Past tense, definite; as, John *was speaking*.

5. Perfect tense, indefinite; which expresses an action,

completely past, but the time not specified; as, he *has finished* his house; or it expresses continued action or being; as, the man *has lived* seventy years.

6. Perfect tense, definite; which expresses an action just finished, or lately finished; as, they *have been repairing* the road.

7. Prior past, indefinite; which expresses an action which was past or finished at or before a particular time; as, he *had received* the news before the mail arrived.

8. Prior past, definite; which affirms an act just past, at or before a particular time; as, I *had been walking*, when my friend arrived.

9. Future tense, indefinite; which gives notice of an event to happen hereafter; as, he *will go* to town to-morrow, and I *shall accompany* him.

10. Future tense, definite; which expresses an action which will take place, and be unfinished at a future time, mentioned; as, when you arrive, he *will be preparing* to receive you.

11. Prior future tense, indefinite; which expresses an action or event which will be past at a future time specified; as, they *will have finished* the work by noon.

12. Prior future tense, definite; which represents that an action will be just past at a future time specified; as, he *will have been preparing* for a visit from you, a week before you arrive.

There is another form of expression which often renders the verb emphatical. This is by the use of *do* in the present tense, and did in the past; as, I *do* beseech you to be careful of your health. I *did* urge you to be more prudent.

The use of this word often renders a repetition of the principal verb unnecessary; as, you write a better hand than I do; that is, than I write. He rode faster than you *did;* that is, faster than you rode.

When any thing is directly affirmed, the form of the verb is in what is denominated the *indicative mode;* that is, the mode which expresses *declaration;* as, we go; they run; you see.

When the verb is used to *command* or *entreat*, it is said to be in the *imperative mode;* as, *go thou; return; be tranquil.*

When actions or events are represented as *conditional*, or *hypothetical*, the verb is said to be in the *subjunctive mode; as, if he be* sick; though you should be disappointed. In the use of this mode, no two authors agree, and no writer's practice is uniform.

[*Note.* The use of *mood*, in grammar, confounds the word with *mood*, temper, or state of mind. This is wrong. I follow Lowth, who always uses *mode*, the proper translation of the Latin *modus*.]

PARTICIPLES.

From verbs are formed participles of the present and perfect tenses.

The participle of the present tense ends in *ing;* as from *read* is formed *reading.* I am now *writing;* I was then *writing;* I shall be *writing.* This participle is always regular.

Observe, this participle denotes an action *present* at some particular time, present, past, or future.

The regular participle of the perfect tense ends in *ed;* as from *turn* is formed *turned;* denoting an act past and finished.

The irregular perfect participles end in *en*, as *spoken*, and in *t*, as *left*, *sought;* or they are still more anomalous.

ADVERBS.

Words which are used to vary or modify the sense of verbs and adjectives, are called *adverbs*, (a name which signifies, words placed near verbs.) As these words vary the sense of adjectives, also, they may be more correctly denominated *modifiers*. Thus, a *man runs*, expresses the action of running, generally without specifying in what manner. But when we say a man runs *fast*, the word *fast* describes the manner of running, and is the *modifier* of *run*. In this sentence, a man is *extremely sick;* the word *extremely* modifies the sense of the adjective *sick*.

PREPOSITIONS.

Prepositions, as the name imports, are words used *before* nouns, to express some relation, situation, effect, or some direction of action or motion.

The prepositions are, *at*, *about*, *above*, *after*, *against*, *amid*, *across*, *around*, *among*, *below*, *behind*, *beneath*, *besides*, *between*, *betwixt*, *beyond*, *by*, *for*, *from*, *in*, *into*, *on* or *upon*, *over*, *to*, *toward*, *with*, *within*, *without*, *under*, *up*, *through*.

Most of these prepositions denote *place*, *position*, or *situation*; as *at*, *by*, *above*, *below*. *Against* indicates opposition in place or motion.

Among denotes *intermixture*. *To*, *from*, *toward*, express motion. *With* denotes union or nearness.

Prepositions require after them the objective case of nouns and pronouns; as *about* the house; *on* the floor; *at* home; *after* us; *toward* them; *to* the city; *from* the river; *for* her; *against* vice; *without* him; *under* the table; *among* the people.

Several of these prepositions are used to modify the sense of verbs; and in this use, they are placed *after* the verb, and might be more properly denominated *postpositions*; but they may be called *modifiers*: as to cast *up*; that is, to *put sums together*; to *give up*, to resign, to surrender; to *set out*, to begin a journey; to *turn off*, to dismiss.

Prepositions often have sentences or phrases after them, instead of nouns; as *before* he came; *after* he arrived; *against* he comes.

These seem to be original forms of expression in our language; it does not appear that any noun has been omitted.

CONNECTIVES OR CONJUNCTIONS.

Conjunctions are words which connect the members of a sentence and form a compound sentence. The principal words used for this purpose are, *and*, *or*, *but*.

And is called a copulative conjunction, because it connects members of a sentence in a continued narration, without any opposition in the sense. Thus, " And ye shall tell my father of all my glory in Egypt, *and* of all ye have seen; *and* ye shall haste *and* bring down my father hither." Gen. xlv. 13. Here are four members united in one sentence.

The *disjunctive* connectives have a different effect. One of these is *or*, which expresses an alternative. Thus, "John *or* Robert will visit you to-morrow." Here are two members in the sentence, the latter disjoined from the former by *or*. The statement is in the alternative; one of the men will visit you, but not both.

The disjunctive *but* continues the sentence, but introduces a member expressing doubt or opposition to what is expressed in the first member; as, "The man says he will pay me to-morrow, *but* it is uncertain, or I doubt it." "He says he can lift a certain weight, *but* it is not possible."

When two or more persons or things in the nominative are connected by the copulative conjunction, they must have a verb in the plural; as John and Robert *are* younger than Thomas; John, Robert, and Thomas *are* older than Henry.

When the names, in the singular, are disjoined by *or*, the verb must be in the singular number, for the assertion is applied only to one of the alternatives; as either John, or Robert, or Thomas *was* present.*

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* The words *if, though, that, notwithstanding, because, during, except, save, provided,* are generally classed with conjunctions or prepositions. But nothing can be further from the truth.

If and *though* are verbs, and always verbs. *If* is only an abbreviation of *give*, or the Saxon spelling of the word, *gif*, which has been obsolete scarcely a century. *Though* is also a verb, defective in all its inflections; but both these words have the signification of verbs, and sentences in which they occur cannot be correctly analyzed, without considering them as verbs. They have no property of conjunctions.

In this sentence, "He will go, *if* you desire it," the original and true form was, he will go, *give that*, you desire it; that is, grant the fact that you desire it, then he will go. The word *that*, referring to the following clause, is generally omitted.

"But I pursue, *if that* I may apprehend." Phil. iii. 12. Here is the original form of expressing condition. *If* is a verb, for *give*, and *that* is the objective case after it, referring to the following sentence or clause.

"But *though that* we, or an angel from heaven, preach to you otherwise."—*Bishops' Bible.* This is the old form of writing, and is good English. *Though* is here a verb, governing *that*, which is a pronoun, or substitute for the sentence following. *That*, after *though*, is now omitted, as it is after *if*.

The phrase above is, *though that*, grant or admit that we, or an angel, &c. "*Though* Moses and Samuel stood before me, yet my mind could not be toward this people." Jer. xv. 1.

EXERCISES IN VERBS.

Let the pupil tell the tense, number, and person, and how each is formed. The figures in the first lesson, show the *persons*, and serve for an example. *He*, *she*, and *it*, are all of the *third* person, but of different genders.

Lesson 1.

Singular Number.

1. I run when I am in haste; I walk when not in haste.
2. *In solemn style.* Thou readest with a clear voice.
2. *In common style.* You paint with a brush.
3. He spells very well; he has a good pronunciation.
3. She steps with ease; she moves with an air.
3. It is good to be afflicted; it makes us humble.

Plural Number.

1. We love modest behavior; we dislike the proud.
2. Ye, you smile when pleased, but frown when displeased.
3. They differ in opinion, yet they are friends.

Because, too, is numbered among the conjunctions. How, then, can we parse such expressions as these? *Because* of these things; *because* of me; *because* of the present rain. They cannot be analyzed on the supposition that *because* is a conjunction. *Because* is now one word, but formerly the parts of the word were written separately, *by cause*; and to parse the foregoing phrase we must still consider *be* and *cause* as two words; *by cause of these things*,

Notwithstanding is a compound of *not* and *withstanding*. This is properly followed by *that*, though this word is often omitted. It rains, but notwithstanding that, (it rains,) I must return. *Withstanding* is always a participle, whether with or without *that*; and *notwithstanding* in union with *that*, or a sentence, always forms the clause independent, or case absolute.

During has the same character and use. It is always a participle of the obsolete verb, *dure*, (to endure,) and with the following words, constitutes the clause independent: as, *during the time*, *during the day*, *during the conversation*.

Provided is a participle of the perfect tense; and with the clause or words following, always constitutes the independent clause. He will ride, *provided* you will furnish him with a horse. Here *provided*, with the following words, constitutes the clause independent. He will ride, you furnishing him with a horse *being provided*; that is, on that condition.

Except, in the sentence "except ye repent, ye shall all likewise perish," is a verb. Except, take away, remove the following fact, or condition, *ye repent*, ye shall all perish.

Save, in the phrases, "fight neither with the small nor great, *save* only with the King of Israel." "Israel burned none of them, *save* Hazor only," *is a verb*; in the latter passage, it governs Hazor in the objective;

LESSON 2.

I traveled last week a hundred miles.
You peformed your task in good time.
The earth was once in a state of chaos.
We planted corn in May and collected the crop in October.
You departed in June and returned in August.
They violated the laws and were punished.

LESSON 3.

I have lived long and have enjoyed good health.
You have gained wealth and reputation.
Virtue has never failed to reward its possessor.
We have sowed thirty acres of land with wheat.
You have mowed twenty acres of grass land.
They have erected a bridge over the river.

LESSON 4.

I had finished my letter before the mail arrived.
You had arrived before the meeting was opened.
She had called on her friend before noon.
We had established business in the west.
You had received payment with interest.
They had tried experiments without success.

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in the former, its object, or objective, is the following part of the sentence, *save, except,* take out of the order given, the King of Israel.

Hence the mistake in the following passages. "There was no stranger with us in the house, *save* we two in the house." *We;* should be *us,* in the objective.

"All men can not receive this saying, *save* they to whom it is given." *They* should be *them.*

But no mistake of the true character of words has been the cause of so much injury, as that of supposing *that* to be a conjunction, in cases where it refers to a sentence. A like mistake was made by early writers, in regard to the Greek, *oti,* and the Latin *quod.* Jerome adopted it, and it runs through his version of the scriptures. The consequence is, that his version abounds with errors like the following: "Ye have heard, *because* it was said to them of old time." In our common version, this mistake occurs in two or three passages; one only will be here mentioned. This is in Romans, viii. 20, 21., where the word *because* should be *that,* and no point should stand between *hope* and *that.* In consequence of this mistake, the passage is hardly intelligible; whereas, by the use of *that,* without the point after *hope,* the meaning is obvious.

These brief remarks show how imperfectly our language has been analyzed. Errors of long standing are retained, in opposition to the clearest evidence, and greatly to the prejudice of the language.

Lesson 5.

I shall probably succeed in business. You will prosper if you are diligent. He will visit us on Monday. They will finish the work this day.	These forms of the verb *foretell.*
I will make punctual payment. You shall have a new coat. He shall receive good wages.	These forms express a *promise.*
You shall obey your father. He shall be your companion. They shall all obey the laws.	These forms express *command, threatening*, or *determination.*

Lesson 6.

I shall have finished the work by noon. You will have arrived at New York by sunset. He will have read the book by six o'clock. We shall have repaired the roads in June. You will have closed your business before night. They will have performed all that was required.	These forms *foretell.*

It must be observed, that the use of *shall* in *promising*, *commanding*, and *threatening*, is confined to declaratory phrases: such as assert or affirm. When the words *when*, *whenever*, *whosoever*, *whether*, *wheresoever*, *till*, *whithersoever*, precede *shall*, this word ceases to express promise, threatening, or determination, and expresses prediction.

So also in conditional phrases, when the words *if*, *though*, *unless*, precede *shall*, it has the sense of *foretelling on condition*.

Thus, *when* ye *shall* see Jerusalem encompassed with armies.

Whoever shall confess me before men.

Whenever he *shall* come, I shall be glad to see him.

Whoever shall exalt himself, *shall* be abased.

In the last example, the first *shall* merely predicts; the latter, expressing affirmation, *threatens*.

As soon as ye *shall* enter the city, ye will find him. I Sam. ix. 13.

Ye will not have gone over the cities of Israel, *till* the Son of man *shall* have come. Math. x. 23.

If he *shall* go; *though* you *shall* be present; *whether* they *shall* come or not. In such phrases, *shall* expresses merely prediction, or a future event.

When a question is asked, *shall* cannot express promise, threatening, or command.

LESSON 7.

Definite tenses, expressing the actual time when a thing is done.

I am writing, while you are reading.
You are reading, while I am writing.
He is singing, while you are knitting.
She is knitting, while you are playing.
It is snowing, while we are dining.
We are talking, while the wind is whistling.
You are moving, while I am sitting still.
They are plowing, while you are reaping.

LESSON 8.

I was walking, when it was raining.
You were looking at the sun, during the eclipse.
He was coming home, and I was waiting for him.
We were dining at two o'clock.
You, or ye, were preparing for a journey.
They were going to school at nine o'clock.

LESSON 9.

I have been mending my pen.
You have been ruling your paper.
He has been delivering a speech.
We have been plowing and planting.
You have been sledding wood.
They have been sawing and piling wood.

LESSON 10.

I had been moving furniture, when you came home.
You had been visiting distant friends.
He had been hunting for partridges.
We had been feasting on venison.
Ye, you had been eating buck-wheat cakes.
They had been suffering with hunger.

LESSON 11.

I shall be turning hay at ten o'clock.
You will be hoeing corn, while I am plowing.
He will be whetting his sythe.
We shall be raking oats for binding.
Ye, you will be disputing at your leisure.
They will be resting in the shade.

These foretell.

LESSON 12.

I shall have been learning my lesson. You will have been riding to town. He, she will have been reading the Bible. We shall have been making a bargain. You, ye will have been exchanging horses. They will have been engaged in conversation.	These foretell.

IMPERATIVE MODE.

Commanding, Advising, Requesting.

Let me have a pen.
Have patience; do thou be patient.
Let us be sober and considerate.
Do you remain at home.
Let the men be paid.
Let me be going.
Be thou, or you, writing.
Do you be reading.
Let us be preparing to depart.
Let them be performing their tasks.

EXERCISES IN THE IRREGULAR VERBS.

SHOWING THE USE OF THE TENSES AND PARTICIPLES.

The pupil may be required to tell the tense in each example.

Abide. Our friend *abides* with us; he *abode* with us a week; he *had abode* with us a long time.

Arise. Rise. A storm *arises* in the west; it *arose* at four o'clock; before we had *risen* from the table. So *rise, rose, risen.*

Awake. Wake. He *awakes,* or *wakes,* early; he *awoke* at five o'clock; he has *awaked,* or *waked,* already.

Bear. You *bear* misfortunes with patience; you *bore* the loss without murmuring; you have *borne* many losses. Losses should be *borne* with fortitude. John was *born* in January.

Beat. The coachman *beats* his horses; he *beat* them yesterday. A dull horse must be *beaten.*

Begin. The day *begins* to dawn. The farmer *began* his work early; the work was *begun* in good season. The man *has begun* to reform; he ought to have *begun* long ago.

Bend. The archer *bends* his bow; he *bent* it with all his strength; the bow was fully *bent*. (*Bended* is sometimes used.)

Bereave. Death *bereaves* us of friends. The widow is *bereaved* or *bereft*. An orphan is a child *bereaved* of its parents.

Beseech. We *beseech* you to be faithful; we *besought* you in vain. We have often *besought* your favor; it has been *besought* with earnestness.

Bid. The parent *bids* his son to be quiet; he often *bade* him to study; the boy, though *bidden*, refused to do as he was *bid*.

Bind. The farmer *binds* sheaves of wheat. A promise *binds* a man to performance. The officer *bound* his prisoner; the prisoner was *bound* with chains. We are all *bound* to obey the laws.

Bite. Animals *bite* with their teeth. The dog *bit* the child. We are often *bitten* by fleas and musketoes.

Bleed. The surgeon *bleeds* his patient; he *bled* him copiously; the patient has often been *bled*.

Blow. Drying winds *blow* from the North West; yesterday the wind *blew* from the East; to-day a mild zephyr has *blown* from the South West.

Break. The oxen *break* a chain; they *broke* it yesterday; it was *broken* into three pieces.

Breed. Stagnant water *breeds* musketoes. The malaria of Italy *bred* diseases. A *well-bred* man never provokes a quarrel.

Bring. Flour *brings* a good price. John *brought* me a present. The contest is *brought* to a happy issue.

Build. We sometimes *build* our hopes in air, as fools have often *built* their houses on sand. Solomon *built* a magnificent temple. *Builded* is sometimes used. This word should be written according to the original, *bild*, *bilt*.

Burst. *Burst* is the same in all the tenses. A bottle *bursts* to-day; another *burst* yesterday; I knew it had *burst*, or had been *burst*.

Buy. We *buy* flour this year, for less than we *bought* it last year, and probably it may be *bought* for a less price next year.

Cast. This verb has no variation for the tenses. They *cast* lots to-day; they *cast* lots yesterday. Lots have often been *cast* for deciding good causes.

Catch. We often *catch* cold imprudently. Formerly, fishermen *caught* salmon in the Connecticut. Since a dam was erected in Montague, no more salmon are *caught* in that river. *Catched* is also used.

Chide. A father *chides* his disobedient children; he *chid* them formerly, and they deserve to be *chid*, or *chidden*.

Choose. He is wise who *chooses* the good and refuses the evil. He who, when young, *chose* the path of virtue, will not, in old age, repent that this course was *chosen*.

Cleave. We *cleave* wood with an ax, or with a beetle and wedges. The farmer *cleft* timber for rails. *Cleft* wood dries better than round wood.

Cling. Men *cling* to their friends, and to their interests. It is not easy to separate men who have long *clung* to a leader.

Clothe. In warm climates, men *clothe* themselves in linen or silk. The industrious man *clothed* his family. The children of the dram-drinker are often *clothed*, or *clad*, with rags; and so is the sluggard.

Come. The laborer *comes* weary from the field. The boy *came* from school late; he might have *come* home at an earlier hour. "*Come* to me, all ye that labor, and are heavy laden, and I will give you rest."

Cost. This verb is the same in all the tenses. Wheat *costs* to-day what it *cost* yesterday, and what it has *cost* for a year past.

Crow, Is now regular; *crowed*. *Crew* is obsolete.

Creep. The child *creeps* before he walks; he *crept* into the parlor.

Cut, Is the same in all the tenses. The farmers *cut* timber. Our first settlers *cut* the trees of the forest to clear the land; and when *cut*, the logs were rolled together and burnt.

Dare. The good citizen *dares* not violate the laws. They *durst* not ask him any more questions.

Deal. *Deal* justly with all men. The citizens have *dealt* bread liberally to the poor.

Dig. I cannot *dig*, and I am ashamed to beg. The drunkard has *dug* his own grave. The husbandman has *digged* a ditch to drain his land.

Do. *Do* what duty requires to be *done*. The man *did* for others what they *did* for him.

Draw. Horses *draw* a sled, or a coach. A heavy load may be *drawn* on snow. The merchant *drew* a bill on his factor.

Drive. The farmer *drives* a team. The purchaser *drove* a herd of cattle to market. The cattle *driven* are called a *drove.*

Drink. The temperate man *drinks* water. The tipler *drank* spirit, till he sunk into the grave.

Dwell. We *dwell* in the land in which our fathers *dwelt.*

Eat. Men *eat* the flesh of animals which *eat* grass. Eve *ate* of the forbidden fruit. She gave to Adam, and he *ate.* And when they had *eaten*, they were afraid of their Maker, for they had sinned.

Engrave. The artist *engraves* a copper plate, which, when *engraved*, or *engraven*, is impressed for a likeness.

Fall. As a tree *falls*, so it lies. The price of stocks *fall* on the alarm of war. Man *has fallen* from his primitive rectitude.

Feel. The sick man *feels* better to-day than he *felt* yesterday, and he might *have felt* better, had he been more prudent.

Fight. Men *fight* for victory, or revenge. Men have *fought* with each other ever since the creation. Armies have often *fought* and gained nothing.

Find. We *find* peace of mind in the practice of virtue. Men have *found* more profit in agriculture, manufactures, and trade, than in mines of gold and silver. He who *finds* pleasure in gluttony and drunkenness, will *find* an early grave.

Flee. "The wicked *flee* when no man pursueth." The enemy *fled* and escaped.

Fling. The champion *flings* his antagonist; and when he has *flung* him, he struts and boasts.

Fly. Birds *fly*. The little robin *flew* at the boy who was climbing to rob her nest. Riches have often *flown* away, and credit too.

Forget. Never *forget* an act of kindness. The chief butler *forgot* Joseph. How often are divine mercies *forgotten!*

Forsake. *Forsake* every vice. The man who *forsook* vicious companions in youth, will not be *forsaken* by friends in old age.

Freeze. The rivers do not *freeze* within the tropics. The man who *froze* his fingers, rubbed the *frozen* limbs in snow.

Get. *Get* wisdom. *Get* understanding. We *got* land for a song. Money *gotten* by gambling is soon lost.

Gild. We *gild* many things with gold leaf. A *gilded*, or *gilt* frame retains long its brightness.

Gird. *Gird* on the harness for combat. "Jesus took a towel and *girded* himself." "Stand with your loins *girt* about with truth."

Give. "*Give* to him that asketh thee." He *gave* liberally to the poor. A man seldom regrets that he has *given* too much.

Go. The righteous *go* to the grave in peace. Abram *went* down into Egypt to sojourn. We *have gone* astray like lost sheep.

Grave. The artist *graves* with an instrument. The plate is *graved* or *graven*.

Grind. The mill *grinds* corn, which, when *ground*, makes meal.

Grow. A man *grows* till he is twenty, or twenty-five years old. The pine tree *grew* to a great hight, and when *grown* it was felled for a mast.

Have. The tenant *has* possession of the house; he *had* possession the last year, and he *has had* it much longer; he *might have had* with it a good farm.

Hang. The cloth *hangs* on the tenter-hooks. The officer *hanged* the convict; he *hung* him with a halter. The room is *hung* with curtains. "On what a slender thread *hang* everlasting things!"

Hear. We *hear* the alarms of war. We love to *hear* news. We *have heard* what our fathers suffered, in settling this land.

Hew. The ax-man *hews* timber; he *hewed* the beams of the church. Timber is first scored and then *hewn*.

Hide. *Hide* the faults of your friend. Nothing can be *hid* from the Almighty. All *hidden* crimes will be disclosed.

Hit. This is the same in all the tenses. The rifle-man *hits* the mark; he *hit* the target yesterday.

Hold. We *hold* a pen in the right hand. The soldiers *held* up their heads. Our lives are *held* by a precarious tenure.

Hurt. This is the same in all the tenses. A bruise *hurts* the flesh. Slander *hurts* the reputation. A man may *hurt* the feelings of his friend.

Keep. Our indispensable duty is to *keep* the Sabbath; the real christian *keeps* it as holy time. But in general the Sabbath is not well *kept*.

Knit. This is the same in all the tenses. Females *knit* stockings; many *have* always *knit* their own stockings.

Know. We now *know* what our fathers *knew* not; and some things will never be *known*.

Lade. The merchant *lades* his ship; he *laded* it with flour; and the ship, when *laden*, sailed for Europe.

Lay. The prudent man *lays* up provisions for winter. The officer *laid* down his commission. The crime of theft was *laid* to the man's charge.

Lead. Obedience to the laws of God *leads* to happiness. We pray that we may not be *led* into temptation. General Washington *led* our armies in the war of the revolution.

Leave. He who migrates *leaves* his country. Our pilgrim fathers *left* England for the enjoyment of religious freedom. Let no business, which can be done to-day, be *left* till to-morrow.

Lend. *Lend* money on good security. The French *lent* us aid in the war, and Holland *lent* us money to pay our debts. The money *lent* was well repaid.

Let. This verb is the same in all the tenses. We *let* a house, and the house is *let* on rent.

Lie. (Down.) We *lie* down to sleep. The servants *lay* too late this morning. They have *lain* too long.

Lose. We often *lose* advantages by delay. England *lost* her colonies by oppressing them. Advantages *lost* are not always recovered. Never *lose* your temper in debate.

Make. Riches *make* to themselves wings and fly away. *Make* not haste to be rich; money *made* in haste is often soon lost.

Meet. Men *meet* for social pleasure; they *meet* for debate. Conventions have *met* and resolved, and *met* and resolved again, and then *met* with disappointment.

Mow. We *mow* grass when in blossom. Grass, when *mowed*, should be well dried. When *mown* late it wants little drying.

Pay. You shall *pay* me to-day. I will *pay* you to-morrow. The debt ought to have been *paid* long ago.

Put. This verb has no variation for tenses. Never *put* your friends to trouble. He *put* his hand to the plow and looked back.

Read. This verb is written alike in all the tenses, but the past tense and participle of the perfect tense have the vowel *e* short. He rĕads well. He rĕad a chapter in the Bible. He has rĕad many books.

Rend. To *rend* is to part by force. A prisoner *rends* his chains, as Samson *rent* withs and cords. When the Jews were afflicted, they *rent* their garments.

Rid. This is the same in all the tenses. We *rid* ourselves of burdens when we can.

Ride. We *ride* on horseback and in carriages. We *rode* to the city and returned on foot. A horse that is *rid* or *ridden* daily must be well fed.

Ring. *Ring* the bell. The sound *rings* in my ears. The sexton *rang* the bell, and when the bell was *rung*, the people assembled.

Rise. See *arise*.

Rive. We *rive* timber for shingles. The man *rived* a thousand. A thousand may be *riven* or *rived* in a day.

Run. We all *run* a race in life. Ahimaaz *ran* faster than Cushi. Let us so *run* as to obtain the prize.

Saw. We *saw* pine logs into boards. We *sawed* all night. Logs, when *sawed* or *sawn*, make boards and plank.

Say. It is not expedient always to *say* what we think. He *said* we might rely on what was *said*.

See. We *see* to-day what we never *saw* before, and what many have not *seen*.

Seek. *Seek* first the kingdom of heaven; let it be *sought* with care. Esau found no place of repentance, though he *sought* it carefully with tears.

Sell. Buy the truth, and *sell* it not. Esau *sold* his birth-right to Jacob. The French government *sold* Louisiana to the United States, for fifteen millions of dollars. It *was sold* for a great price, but worth the money.

Send. We *send* to the East Indies for spices and for tea. Our societies have *sent* many missionaries to preach the gospel. They are *sent* on important business.

Set. This verb is the same in all the tenses. Distinguish this word from *sit*. We *set* a chair or a table. Our guests *sit* in chairs and at the table. The fowler has *set* a net to catch birds. The traveler has *set* out on his journey.

Sit. A judge *sits* on the bench; a bird *sits* on her eggs; and when she has *sat*, or *sitten*, a certain time, the young are hatched.

Shake. When a man *shakes* his head, he means to deny or refuse. The boy *shook* the tree and the apples fell. The sinner trembles at the sound of a *shaken* leaf.

Shape. The statuary *shapes* a block of marble. He *shaped* the head of the judge. We are *shapen*, or *shaped*, in sin.

Shave. May be ranked with the regular verbs, past tense and participle *shaved*.

Shear. Our farmers *shear* their sheep in the spring. One farmer *sheared*, the last year, five hundred sheep. We say a sheep is *sheared*, or *shorn*.

Shed. This verb is the same in all the tenses. The clouds *shed* rain. Whoever *sheddeth* man's blood, by man shall his blood be *shed*. Rivers of blood have been wickedly *shed* in wars.

Shine. The moon *shines* with borrowed light. The same sun which *shone* upon Adam, hath *shined* or *shone* upon all his posterity.

Shew. The guide *shews* the way. The way is *shewn* to us. This verb is obsolescent. *Show* is now generally used.

Show. *Show* us the path of safety. The guide *showed* us the palace of the king. The interior of the palace was *shown* to us.

Shoe. The smith *shoes* horses and oxen; he has *shod* thousands. Horses are *shod* for defending their hoofs.

Shoot. Boys should not *shoot* little birds. A man *shot* a robin in the garden, and robbed us of the little warbler's song.

Shrink. Flannel *shrinks* in hot water; sometimes it is shrunk too much. A conscientious man *shrinks* from the commission of a crime.

Shred. This verb has no variation for the tenses. We *shred* cloth; and cloth is *shred*.

Shut. This verb is the same in all the tenses. We *shut* a door to-day; we *shut* it yesterday; and the door was opened and *shut* every hour.

Sing. We *sing* psalms in worship. When the Israelites had escaped from Egypt, Moses and the children of Israel *sang* a song to the Lord. The song was *sung* with joy.

Sink. Lead *sinks* in water. The drowned man *sunk*. Many a man has *sunk* an estate by once writing his name on the back of a note.

Slay. We *slay* an ox for food. David *slew* Goliath with a sling and a stone. What untold millions of men have been *slain* by their fellow-men! To *slay* is to *strike*; and our ancestors used to say, to *slay* a bargain, as we now say to *strike* a bargain.

Sleep. Men *sleep* to refresh their weary limbs; but they should not lie in bed when they have *slept* enough.

Slide. Children *slide* on sleds. A few years ago, a vast body of earth *slid* down from one of the White Mountains, and buried a family. Immense masses of snow have at times *slid* down from the Alps, and buried whole villages.

Sling. We do not often *sling* stones; but the ancients *slung* stones in battle.

Slink. Guilty men *slink* from public notice; they have often *slunk* and hid themselves.

Slit. Men *slit* iron into nail rods. Iron is *slit* or *slitten*.

Smite. Men *smite* their enemies. The Lord *smote* Benjamin before Israel, and twenty-five thousand were *smitten*.

Sow. Farmers *sow* grain in the spring; they formerly *sowed* winter wheat, which failed, and now spring wheat is often *sown*.

Speak. Young men *speak* orations. Demosthenes *spoke* with great effect. "A word fitly *spoken*, is like apples of gold in pictures of silver."

Speed. We do not often say to *speed*; sometimes it is said, an arrow was *sped*.

Spend. "We *spend* our years as a tale that is told." Let time be well *spent*. How much money is *spent* in folly and vice!

Spill. The careless maid *spills* water, and makes trouble. Water *spilt* on the ground cannot be gathered again.

Spin. Females used to *spin* for making cloth; they *spin* little now, as most wool and cotton are now *spun* by machinery.

Spit. This verb is the same in all the tenses. The old preterit *spat* is not in use.

Spread. This verb is not varied for expressing time. Men *spread* grass for making hay. They *spread* yesterday, and the grass was well *spread*.

Spring. The antelope *springs* from rock to rock. Grass *springs* after winter, and the time when plants begin to grow, we call *spring*. The ship *sprung* a leak.

Stand. We *stand* or sit at pleasure. We *stood* an hour to hear an eloquent address. A church now *stands* where a theater once stood.

Steal. "He that *steals* my money *steals* trash." "Let him that *stole*, steal no more." *Stolen* goods are sometimes recovered.

Sting. A hornet *stings*; and a profligate man is often *stung* with remorse.

Stride. A man *strides* when he takes long steps. The hunter *strid* or *strode* hastily over the field.

Strike. The coachman *strikes* his horses. The ball *struck* the target. "Why should ye be *stricken* any more?"

String. Females *string* beads. Onions are *strung* on ropes of straw.

Strive. Men *strive* for fame or for office. "Two men of the Hebrews *strove* together." "Thou art found and caught, because thou hast *striven* against the Lord."

Strew. Men *strew* ashes on land for manure. The field of battle was *strewed* with dead bodies. Strew is now a regular verb.

Strow. *Strow* is a different spelling of *strew*; and the participle *strown* is used.

Swear. Men are very vulgar, as well as wicked, when they *swear* profanely. *Swear* not at all. The witness *swore* to the fact. An oath is *sworn* in court, and a witness is *sworn* to testify the truth.

Sweat. This verb is the same in all the tenses. Horses *sweat* profusely. Oxen *sweat* very little, or not at all.

Swell. A limb *swells* in the dropsy; very often it is greatly *swelled*. The man who was provoked *swelled* with anger. This verb is regular, and the old participle *swollen* may well be neglected.

Swim. Light bodies *swim* in water. The horseman *swam* the stream, and shipwrecked mariners have often *swum* to the shore.

Swing. We *swing* for exercise. The dragoons *swung* their swords and made a great flourish.

Take. The provident man *takes* care of his fire at night. The Assyrians *took* Jerusalem, and the captives *taken* were removed to Assyria.

Teach. It is our duty to *teach* children what is useful. Moses "*taught* the Israelites statutes and judgments." We are often *taught* truth by severe experience.

Tear. Children *tear* their clothes and their books. Two bears *tore* in pieces forty and two children who mocked Elisha.

How many mothers are employed to mend garments *torn* by rude boys and girls.

Tell. We *tell* a story or tale, and too often believe what one person *told* to another. The world is full of reports *told* without authority.

Think. *Think* no evil. Men have often *thought* themselves rich, and afterward found that what they had *thought* was a mere illusion.

Thrive. The industrious young man *thrives*. Such men have almost always *thrived*. *Throve* and *thriven* are little used.

Throw. Boys *throw* stones, and workmen *throw* silk. The wrestler *threw* his fellow. Good advice is often *thrown* to the winds.

Thrust. This is the same in all the tenses. The soldier *thrusts* at his enemy.

Tread. *Tread* lightly on the ashes of the dead. We *tread* the road which our fathers *trod*. The wicked will be *trodden* in the dust.

Wax. This is now a regular verb. We say, the man *waxed* strong; he had *waxed* proud.

Wear. We *wear* better cloth than our ancestors did. They *wore* home-made cloth. When linen and cotton garments are *worn* out, the rags are used for paper.

Weave. Men *weave* cloth by hand or by machinery. They formerly *wove* by hand only. Carpets are *woven* in looms.

Weep. *Weep* not to excess. Surviving friends have sometimes *wept* at the loss of relatives, till they have impaired their health.

Win. The victor *wins* in battle; and what is *won* is often given back to its former owner. What is *won* seldom pays the expense of winning.

Wind. Workmen *wind* thread on spools; sometimes yarn is *wound* into balls.

Work. Men *work* hard for money. When the laborer has *worked* all day, he sleeps well at night. *Wrought* silk is sold in the shops.

Wring. Women *wring* clothes after washing them. The heart is sometimes *wrung* with grief.

Write. *Write* plain, legible characters, that men may not be puzzled to read what is *written*. Paul *wrote* many epistles, and all he *wrote* were *written* for the common benefit of mankind.

CHAPTER XV.

CHRONOLOGY.

CHRONOLOGY treats of time, the method of measuring its divisions, and of adapting these to the illustration of history, by ascertaining the time when persons lived, and when particular events and transactions took place.

We have no idea of *time*, or *duration*, except by means of its divisions, or the succession of events in the physical world. We speak of time, past, present, and future, with relation to events which have taken place, which now exist, or which are to come.

Time is measured by the revolutions of the heavenly bodies; chiefly by those of the sun; in other words, by the revolution of the earth round the sun, and its revolution on its axis. The most important division of time, is one revolution of the earth round the sun, which is the *year*. Next is the earth's revolution on its axis, which constitutes the astronomical *day*, of twenty-four hours.

The revolution of the moon round the earth, is another division of time, called a *lunar month*.

The establishment of the Sabbath, by Divine command, constitutes another division of time, consisting of seven days, which in Christian nations is the *week*.

There are other divisions of time, which have been used by astronomers and historians:

The *Cycle of the sun* is a period of twenty-eight years, in which the days of the month return to the same days of the week, and the sun's place to the same signs and degrees of the ecliptic, on the same months and days.

The *Cycle of the moon*, or *Golden Number*, is a period of nineteen years, in which time the conjunctions, oppositions, and other aspects of the moon, are nearly the same as they were on the same days of the month in a former period.

The *Julian Period*, is a period of years formed by multiplying twenty-eight, the years of the solar cycle, by nineteen, the years of the cycle of the moon, and the product by fifteen, the period of the Roman Indiction. The result is a period of 7980 years.

The *Roman Indiction*, or *Cycle of Indiction*, is a period of fifteen years, which is said to have had its origin from the Emperor Constantine, who, having reduced the time of military service to that period, laid an extraordinary tax, (*indixit*, whence *indictio*,) at the end of each term, for the purpose of paying his troops.

An *Olympiad*, is a period of four years, by which the Greeks measured time. This name was given to this period, on account of the celebration of the *Olympic Games*, at Olympia, every fourth year; or because these games were dedicated to the *Olympian* Jupiter. These games were instituted by Pelops, 1307 years before the Christian era.

This mode of reckoning time did not commence at the first institution of these games; but according to careful computations, the first Olympiad began 776 years before Christ; and this mode of computing time ceased about the year 440 after the Christian era.

An *Epoch*, is a point of time fixed by *chronologists* and *historians*, from which any number of years is to be counted.

An *Era*, is a point of time fixed by a *nation*, from which any number of years is to be counted.

Memorable Eras.

B. C.	
4008,	The Creation of the World.
2352,	The Deluge, which destroyed the Old World.
2247,	The attempt to build Babel.
1985,	The migration of Abram from Haran to Canaan.
1555,	The Exodus, or departure of the Israelites from Egypt.
1184,	The destruction of Troy by the Greeks.
1051,	David besieged and took Jerusalem.
1008,	The temple dedicated by Solomon.
979,	The kingdom of Israel divided, in the reign of Rehoboam.
776,	The Era of the Olympiads began.
773,	Rome founded.
720,	Samaria taken by Salmaneser, and the ten tribes removed in captivity.
598,	Jehoiachin carried captive to Babylon.

586, Jerusalem taken by Nebuchadnezzar, and the Jews removed in captivity to Assyria.

430, The history of the Old Testament finished.

A. D.

1, The birth of Christ, in the year of the world, 4004. This is found to be four years too late; but this is the *Christian Era*, from which all Christian nations count time.

373, The Bible translated into the Gothic language, by Ulphilas, Archbishop of Upsal. This version has been lost, except the translation of the four Evangelists.

622, The Hegira, or flight of Mohammed, the Arabian impostor, from Mecca to Medina. This is the era from which the Mohammedans count the years; but the year, in their reckoning, consists of 354 days only. Therefore, to find any given year of this era, corresponding to any year of the Julian Period, multiply the year of the Hegira by 354, divide the product by 365, and from the quotient subtract the intercalations; *i. e.*, as many days as there are periods of four years in the quotient, and to the remainder add 622.

1360, The Bible translated into English, by Wiclif.

1440, The art of printing invented by Koster, at Harlaem, in Holland.

1492, America discovered by Columbus.

1494-5, Prima Vista, or Newfoundland, discovered by John Cabot.

1498, The Labrador coast discovered, by Sebastian Cabot, June 11, O. S.

1498, The Continent of South America discovered, by Columbus, August 1.

1517, The Reformation begun by Luther.

1525, The New Testament translated; by William Tyndale, first printed at Wittemberg, in Germany.

1532, Tyndale and his associates finished the translation of the whole Bible, and the copy was printed on the Continent. But while Tyndale was preparing for another edition, he was seized, condemned for heresy, strangled, and burnt at the stake, in September, 1536.

1611, The present common version of the Scriptures first printed, in the reign of James I.

CHAPTER XVI.

ORDERS OF ARCHITECTURE.

ARCHITECTURE is the art of building.

An *order* in architecture consists of two principal members, the column, and the entablature.

A column is a long round body, tapering from its base to the top. Its use is to support some part of a building; and it serves also for ornament.

Originally the word *column* was applicable to wood only, as the column was the stem of a tree, or made in imitation of it. But the word is now sometimes used for *pillar*, which is properly a *pile* of stones or bricks.

A column consists of three principal parts, the base, the shaft, and the capital.

The base of a column is the part between the top of the pedestal, and the bottom of the shaft; or when there is no pedestal, it is the part between the bottom of the column and the plinth.

The shaft is the body of the column from the base to the capital. The capital is the uppermost part of the column serving as the head, or crowning, immediately over the shaft, and under the entablature.

The pedestal is the lowest part of a column, or pillar, serving to sustain it. It consists of three parts, the base, the die, and the cornice.

The plinth is a flat square member, in form of a brick, at the bottom of the order. (Greek, *plinthos*, a brick.)

The entablature is the part of the order which is over the capital, including the architrave, frieze, and cornice.

The architrave is the lower division of the entablature, resting immediately on the column.

The frieze is a part of the entablature between the architrave and cornice. It is a flat face, and usually enriched with figures of animals, or other sculptured figures.

The cornice is the uppermost part of the entablature, and that which crowns the order.

In ornamenting columns, there are eight regular moldings; the fillet, listel, or square; the astragal, or bead; the torus, or tore; the scotia, mouth, or casement; the echinus, ovolo, or quarter round; the inverted cyma, talon, or ogee; the cymatium, and the cavello, or hollow.

The fillet, or listel, is a little square, generally placed as a little crown over a greater molding.

The astragal is a little round molding which surrounds the top or bottom of a column, in the form of a ring. It is often cut into beads or berries.

The torus is a large round molding on the base of a column.

The scotia, or casement, is a semicircular cavity, or channel, betwen the tores, in the bases of columns.

The ovolo is a round molding, the quarter of a circle.

The talon, or ogee, is a molding consisting of two members, the one concave, the other convex. When the concave part is at the top, it is called an inverted talon.

The cymatium is a molding of the cornice, the profile of which is waving; that is, concave at the top, and convex at the bottom.

The cavello is a hollow member, or round concave molding, containing the quarter of a circle; used as an ornament in cornices.

The volute is a spiral scroll, used in the Ionic and Composite capitals, as a principal ornament.

THE FIVE ORDERS.

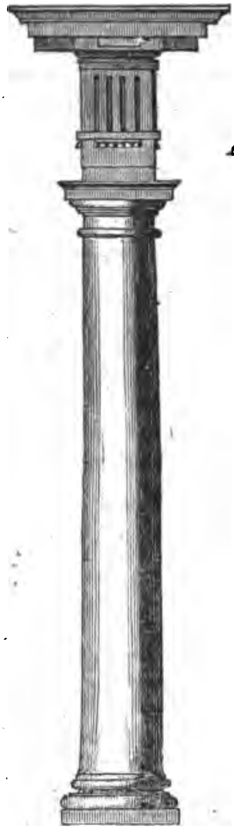
In architecture there are five orders; the Tuscan, the Doric, the Ionic, the Corinthian, and the Composite.

The Tuscan order is the most simple. The hight of it is fourteen modules; that is, semidiameters of its shaft at the base. It is void of ornaments, but very massy and strong. It is now little used.

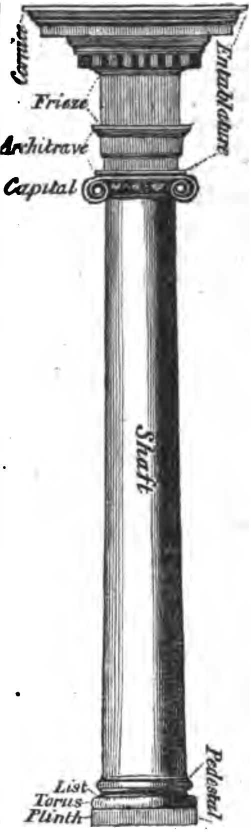
The Doric order, the most ancient, is next in strength to the Tuscan; and for its robust and masculine appearance, it is sometimes called the Herculean order. Its hight, including its capital and base, is sixteen modules, or semidiameters.

The Ionic order is more slender than the Tuscan and Doric; it is simple, yet graceful and majestic. Its hight is eighteen modules, and that of the entablature is four and a half. It is sometimes fluted; that is, channeled.

Doric Order.



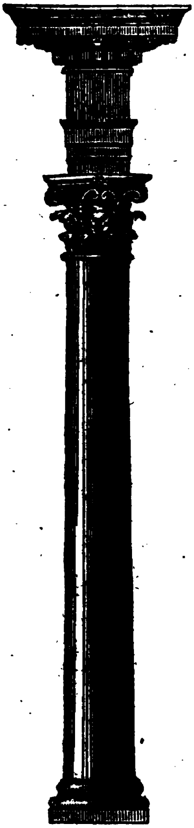
Ionic Order.



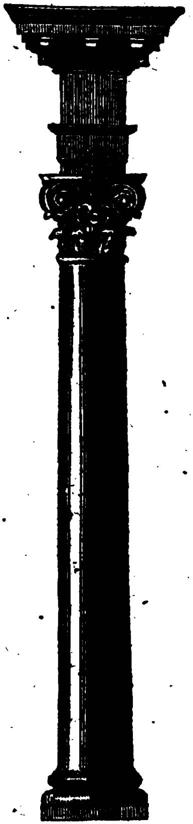
The Corinthian order has very delicate proportions. It is divided into a variety of members, and enriched with a profusion of ornaments. This should be twenty modules in *hight*, and the hight of the entablature five modules.

Composite order is only a species of the Corinthian,
erefore it retains much of the same character. The

Corinthian Order.



Composite Order.



of the column and the entablature is the same as in the
hian. It is enriched with ornaments.
ilaster is square in form ; but its bases, capitals, and en-
re have the same parts as those of the columns. Pilas-
ldom project beyond the wall more than one quarter of

their diameters. They are used in churches, galleries, and halls, both for interior and exterior decorations.

Attics are square columns, with their cornices. They are placed at the uppermost part of an edifice, to which they serve as a crown; indeed they are the finishing for the other orders. The hight should not exceed one third of that of the order, nor be less than one quarter.

The triglyph in the frieze of the Doric order, consists of two entire channels, or gutters, at a right angle, called glyphs, and separated by three interstices.

The dentil, resembling a tooth, is an ornament in cornices, used particularly in the Ionic and Corinthian orders.

Modillions are ornaments in the cornice of the Ionic, Corinthian, and Composite orders; a sort of brackets to support the projecture of the larmier, drip, or eaves.

A mutule is a square modillion under the cornice.

A colonnade is a series of columns in a circular form; it is called also, a peristyle.

Intercolumniation is the space between two columns, which space is to be determined by the hight and size of the columns.

An arch is a segment, or part of a circle, constructed with stones and bricks, and supported by its own curve; or it is made with wood, and supported by its own mechanism. The top, or middle stone in an arch, is called the key stone.

A console is a bracket, or shoulder piece of an ornament cut upon the key of an arch.

An archivault is the inner contour of an arch, or a band adorned with molding, running over the face of the stones, and bearing upon the imposts.

An impost is that part of a pillar, in vaults and arches, on which the weight of the building rests, or the capital of the pillar which crowns the pier.

CHAPTER XVII.

BANKING INSTITUTIONS.

In commerce, and in all money concerns, great use is made of banks. A bank is a fund of money, or joint stock, formed by the contributions of individuals, for the purpose of discounting notes and lending money. The subscribers are called *stockholders*, and are incorporated by law; that is, they are constituted *one body*, with power to choose their president, directors, and other officers, to sue and be sued, and to transact other business in the manner prescribed by law.

Banks lend money for a certain number of days, or months, and take the interest of the note, at the time of drawing the money; that is, the interest is deducted from the amount of the note, and this is called a discounting of the note.

Banks are bound by the law to redeem their bills with gold, or silver, whenever they are presented for payment. For this purpose, they must keep gold and silver in the vaults, at all times, sufficient to answer any demand that may be made. But as people generally prefer to take the bills or notes of the bank, on account of the convenience of carriage, most of the funds of the bank, in gold and silver, lie in the vaults, and bills to a greater amount than such funds, may be safely issued.

The maker and signer of a note is called the *drawer*; but for greater security, every note presented for discount must have an *indorser*, a person who writes his name on the back of the note, and by this act becomes liable to pay the note, if the drawer fails to make payment. Sometimes there are several indorsers, and the person to whom the note is indorsed is called the *indorsee*. The indorsee may be the bank or an individual. All the indorsers are liable to pay the note, if the drawer fails.

Banks also discount *bills of exchange*. A bill of exchange is an order drawn by one man on some person or company at a distance, requiring him or them to pay the amount to the holder of the bill. The person who gives the order is called the *drawer,* and the person on whom the order is drawn, is called the *drawee.*

Notes and bills of exchange are usually assignable, or negotiable; that is, they are made payable to *order;* and in this manner, a note or bill may pass from one person to another, to any extent, and the last holder of the note or draft is entitled to receive the money.

If a note due to the bank is not paid when due, it is *protested* for non-payment, and a suit in law may be brought to recover the money from the drawer or from an indorser.

If a bill of exchange, drawn in one country, upon a person in another country, is not paid, it is also protested, and returned to the original holder, who may demand the money from the drawer, with damages. The amount of damages depends on usage, and is different in different countries.

By custom, notes and bills of exchange are usually not *payable* on the day when they are due; but *days of grace* are allowed for the drawer to make payment. The days of grace are different in different countries. In the United States, *three days* are thus allowed to the debtor; and notice is given to him, when the note will be due, that he may make provisions for payment at the expiration of the three days.

Banks, when well conducted, are very useful for commercial and manufacturing purposes; but if not well managed, they may fail, and bring extensive ruin on the community; and if multiplied so as to issue paper beyond the necessary quantity of circulating medium, they may occasion a depreciation, which shall be very injurious.

FORMS OF NOTES.

No. 1.

Sixty days from date, I promise to pay to A. B., five hundred dollars, for value received.

N. D.

New Haven, April 20, 1839.

The foregoing note bears no interest, and is not payable to order; it is payable only to A. B.; of course, it is not an *assignable* or negotiable note.

No. 2.

Sixty days after date, I promise to pay to N. B., or his order, five hundred dollars, value received.

O. M.

New Haven, October 4, 1839.

This note is payable to the order of the drawee, N. B., and is therefore an assignable or negotiable note, but it bears no interest. If N. B. wishes to sell the note, he writes his name on the back of it, which is called an indorsement; the person to whom he sells it is the assignee or indorsee; and the latter, by indorsing the note, may sell it to another person; and this person may indorse it to another, &c. The person who sells the note, may write an order for the payment of the money to the assignee; or he may indorse his name *in blank;* that is, leave the indorsee to write an order, at his pleasure.

No. 3.

Ninety days from date, I promise, for value received, to pay to A. M., or order, one thousand dollars, with interest.

S. W.

New Haven, August 10, 1839.

This note bears interest and is negotiable.

No. 4.

Ninety days from date, I promise to pay to A. N., or order, five hundred dollars, at the New Haven Bank, for value received.

N. S.

New York, Sept. 20, 1839.

In this note the place of payment is specified.

MONEY.

Money is some material which is used by men to represent goods or property, in purchase and sale; or it is a light and convenient substitute for property.

In the early ages of the world, before gold and silver were known or in use, all trade was by barter, or the exchange of one commodity for another. Among our rude ancestors in Europe, *cattle* were mostly used for this purpose. Hence the name of cattle, (*fea*, or *feah*,) gave rise to our word *fee*, emolument, or compensation for services.

But the materials generally used by all nations, as the representatives of property in purchase and sale, are *gold*, *silver*, and *copper*. Before men had learned to coin their metals, they were estimated by weight. In this manner they were used by the Israelites in the days of Abraham.

At length commenced the art of *coining*, by which impressions are made by authority, on pieces of gold, silver, and copper, by which their value is known; and by dates or figures, the time of coining, and the sovereign or state that coins them, are also designated.

As nations increase in wealth, the vast amount of commodities continually bought and sold, renders it inconvenient to use gold and silver, especially silver, in the transfer of property. The trouble of counting the value of coins would be very great, and the weight of silver, to represent a great amount of commodities, would render it very inconvenient to be carried from the buyer to the seller.

To remedy this inconvenience, commercial nations use bank notes, orders, bills of exchange, or checks on banks, which are representatives of gold and silver.

As money is the representative of commodities, there should be current in every community, a sufficient quantity for the demands of trade. When the quantity in circulation is too small, the prices of property will be low; as the quantity is increased, prices are enhanced; and if the quantity is a great superabundance, the prices of property, of salaries, and wages, will rise in proportion. In this case, the high prices do not indicate an *increased value* in commodities, but a *depreciated value* of money. Suppose one million of dollars to be a sufficient currency in a state, with wheat at one dollar the bushel, then by doubling the circulating money, the price of wheat will be raised to two dollars the bushel; but in this case, two millions of dollars represent no more property than one million did in the former case. The depreciation of money, and not the increased value of property, occasions the *higher prices*.

During the revolution, Congress had no funds for paying the army, and for the purchase of provisions and ammunition. They were obliged to issue notes, or bills, promising payment at a future day. They continued to issue these bills till the amount was so great, that they depreciated till one hundred dollars in bills would purchase only one dollar in silver. At length the bills lost all value; no person would take them, and they ceased to circulate. After the end of the war, they were, by act of Congress, redeemed at the rate of forty dollars for one in coin.

These principles and facts show the great importance of forbearing to issue bills of credit beyond the demands of trade. Of equal importance is it, that the currency of a country should have a *stable* value; and that different kinds of currency should be of *uniform* value. Fluctuations in the value of money, and diversities of value in the various kinds of currency in a commercial community, not only produce immense inconvenience, but are often the sources of extensive injustice.

CHAPTER XVIII.

PUNCTUATION.

PUNCTUATION is the marking of the several pauses which are to be observed, in reading or speaking a sentence, or continued discourse. By means of pauses, a discourse is divided into periods or complete sentences, and these into phrases.

A period is a sentence complete, making perfect sense, and not connected in construction with what follows. The pause after the period is marked by a point, [.] and in speaking, is distinguished by a cadence, or fall of the voice.

The members of a period, or clauses and phrases, are all more or less connected in sense, and according to the nearness of the connection, are marked by a comma, [,] a semicolon, [;] or a colon, [:]

The comma is the shortest pause, and is often used to mark the construction, where very little interruption of voice is allowable.

A simple sentence or clause contains an affirmation, a command, or a question; that is, one personal verb, with its nominative and adjuncts. By *adjuncts*, is meant any phrase, or number of words, added by way of modifying, or qualifying the primary words. Thus, when it is said, "Cicero was an orator *of a diffuse style*," the latter words, *of a diffuse style*, are the *adjunct* of *orator*, and the whole forms a complete simple sentence, with one *verb*, or affirmation.

A phrase contains no assertion, or does not amount to a proposition.

COMMA.

Rule I. In general, the parts of a simple sentence, or clause, are not to be separated by any point whatever; as, "Hope is necessary in every condition of life." But when a simple sentence is long, or contains a distinct phrase, or phrases, modifying the affirmation, it may be divided by a comma; as, "to be very active in laudable pursuits, is the distinguished *characteristic* of a man of merit." "By revenging an injury, a man is but even with his enemy." In most cases, where a short pause will give distinctness to ideas, a comma is well placed after an important word; "to mourn without measure, is folly; not to mourn at all, insensibility."

The pause after *measure*, in this sentence, is essential to the strength of the expression. "The idea of beauty is vague and undefined, different in different minds, and diversified by time or place."—*Rambler*.

Rule II. When a connective is omitted between two or more words, whether names, adjectives, pronouns, verbs, or modifiers, the place is supplied by a comma; as, "love, joy, peace, and blessedness are reserved for the good." "The miseries of poverty, of sickness, of captivity, would, without hope, be insupportable."—*Rambler*. "We hear nothing of causing the blind to see, the lame to walk, the deaf to hear, the lepers to be cleansed."—*Paley*. "He who loves, serves, and obeys his Maker, is a pious man." "Industry, steadily, prudently, and vigorously pursued, leads to wealth." "David was a brave, martial, enterprising prince." "The most innocent pleasures are the most rational, the most delightful and the most durable."

Rule III. Two or more simple sentences closely connected in sense, or dependent on each other, are separated by a comma only; as, "when our vices leave us, we flatter ourselves we leave them." "The temperate man's pleasures are durable, because they are regular." "That all the duties of morality ought to be practiced, is without difficulty discoverable, because ignorance or uncertainty would immediately involve the world in confusion and distress."—*Rambler*, 81.

Rule IV. The sentence independent, or case absolute, detached affirmations or phrases involved in sentences, and other important clauses, must be separated from the other parts of a sentence, by a comma; as, "The envoy has returned, his business being accomplished." "The envoy, having accomplished his business, has returned." "Providence has, I think, displayed a tenderness for mankind."—*Rambler*. "The decision of patronage, who was but half a goddess, has been sometimes erroneous."—*Rambler*. "The sciences, after a thousand indignities, retired from the palace of patronage."—*Ibm*. "It is, in many cases, apparent."—*Ibm*.

Rule V. A comma is often required to mark contrast, antithesis, or remarkable points in a sentence, and sometimes very properly separates words closely dependent in construction; as, "a good man will love himself too well to *lose*, and his neighbor too well to *win*, an estate by gaming." "Prosperity *gains* friends, and adversity *tries* them." "It is harder to avoid censure, than to gain applause."

"Though deep, yet clear; though gentle, yet not dull."

Rule VI. A single name in apposition is not separated by a comma; as, "the Apostle Peter"—but when such name is accompanied with an adjunct, it should be separated; as, "Parmenio, a friend of Alexander's, hearing the great offers that Darius had made, said, 'Were I Alexander, I would accept them.'" "So would I, (replied Alexander,) were I Parmenio."

Rule VII. Terms of address, and words of others repeated, but not introduced as a quotation, are separated by a comma; as, "wherefore, Sirs, be of good cheer." "My son, hear the counsel of thy father." "Thus shalt thou say to the children of Israel, I AM hath sent me to you."—*Exodus*.

Rule VIII. Modifying words and phrases, as, however, nay, hence, besides, in short, finally, formerly, &c. are usually separated by a comma; as, "It is, however, the task of criticism to establish principles."—*Rambler*.

SEMICOLON.

The semicolon is placed between the clauses of a period, which are less closely connected than such as are separated by a comma.

First. When the first division of a sentence completes a proposition, so as to have no dependence on what follows, but the following clause has a dependence on the preceding, the two parts are separated generally by a semicolon; as, "It may be laid down as a maxim, that it is more easy to take away superfluities than to supply defects; and therefore he that is culpable, because he has passed the middle point of virtue, is always accounted a fairer object of hope, than he who fails by falling short."—*Rambler*. In this sentence, the part of the sentence preceding the semicolon, is a perfect period in itself, and might have been closed with a full point; but the author has added another division, by way of inference, and this is dependent on the first division. The author proceeds—"The one has all that perfection requires, and more, but the excess may be easily retrenched; the other wants the qualities requisite to excellence." Here the first division makes a complete proposition; but the antithesis, begun by the numeral *one*, is not complete, without the last division.

"Economy is no disgrace; for it is better to live on a little, than to outlive a great deal."

"Be in peace with many; nevertheless, have but one counselor of a thousand."

"A friend can not be known in prosperity; an enemy can not be hid in adversity."

In general, then, the semicolon separates the divisions of a sentence, when the latter division has a dependence on the former, whether the former has a dependence on the latter or not.

Secondly. When several members of a sentence have a dependence on each other, by means of a substitute for the same principal word, and the clauses, in other respects, constitute distinct propositions, the semicolon may be used: as, "Wisdom hath builded her house; *she* hath hewn out her seven pillars; *she* hath killed her beasts; *she* hath mingled her wine; *she* hath also furnished her table."—*Prov.* 9.

COLON.

The colon is used when the sense of the division of a period is complete, so as to admit of a full point, but something is added by way of illustration; as, "A brute arrives at a point of perfection that he can never pass: in a few years he has all the endowments he is capable of; and were he to live en thousand more, would be the same thing he is at present." *Spect.* No. 111.

NOTE.—That slight dependence of a subsequent sentence upon a preceding one, which is marked by a colon, is also marked by the full point; or we are not to suppose a full point precludes a connection between entences. Let the following sentences from the Rambler, No. 31, be ited as an example.

"With the great and ambitious, I would discourse of honors and adancements.—To the rich I would tell of inexhaustible treasures and the ure method to obtain them. I would teach them to put out their money n the best interest, and instruct the lovers of pleasure how to secure nd improve it to the highest degree. The beauty should learn of me how to preserve an everlasting bloom. To the afflicted I would administer comfort, and relaxation to the busy."

All the parts of a continued discourse are connected; and often by such nice grades of dependence, that it is not easy to discern, much less to mark the minute distinctions.

PERIOD.

The period or full point marks a completion of the sense, a cadence of the voice, and the longest pause used between sentences. It closes a discourse also, or marks the completion of a subject, chapter, or section.

The full point is used also after initials when used alone; as after N. S. for New Style; and after abbreviations; as, *Croc. Anglic.* for Crocus Anglicanus.

To these may be added,

The dash—which marks a break in the sentence, or an abrupt turn; as, "If thou art he—but O how fallen!"

The interrogation point ? that closes a sentence which asks a question; as, "How long, ye simple ones, will ye love simplicity ?"

The exclamation point ! which is used after sudden exclamations of surprise, or other emotion; as, "O happiness! our being's end and aim!"

The parenthesis ( ) and hooks [ ] include a remark or clause, not essential to the sentence in construction, but useful in explaining it or introducing an important idea. They mark a moderate pause, and the clause included is read with a depressed tone of voice; as,

"Know then this truth (enough for man to know)
Virtue alone is happiness below."—*Pope.*

It will be readily seen that the sentence is not at all dependent on the parenthetical clause; but the converse is not true, for the clause has a dependence, more or less remote, on the sentence. Thus, *enough for man to know*, is not intelligible without connecting it with the parts of the sentence preceding and following. So in this passage: "If any one pretends to be so skeptical, as to deny his own existence, (for really to doubt of *it*, is manifestly impossible,) let him enjoy his beloved happiness."—*Locke*, 4, 10, 2. The included clause here is connected with the preceding part of the sentence, and *it* is a substitute for *existence*.

With regard to the duration of the pauses, it may be observed, that the comma, semicolon, colon, and full point, may bear to each other the proportion of one, two, three, four, and the interrogation point and exclamation point may be considered each as equal in time to the colon or period. But no precise rule can be given, which shall extend to every case; the length of the pauses must depend much on the nature of the discourse, and their respective proportions may be often varied to advantage by a judicious speaker.

CHAPTER XIX.

PROSODY—LAWS OF VERSIFICATION.

The following rules for the composition of English verse, are drawn from the writings of Dryden, Pope, and other great masters of poetry, chiefly by the late Judge Trumbull, of Connecticut, who was, probably, the most accurate critic, in this department of literature, which the present age has produced. A careful attention to these rules, may check the prevalence of mistakes in measure, which often disfigure the compositions of modern writers.

Prosody is that part of grammar which treats of the pronunciation of words, and the laws of versification.

Pronunciation is regulated principally by *accent* and *quantity*.

Accent is a particular stress of voice with which a certain syllable of a word is uttered, and by which it is distinguished from the others. Thus, in pronouncing *probability*, we lay a greater stress of the voice upon the third syllable, than upon the others—the voice naturally resting upon that, and passing over the others with rapidity and a slight enunciation. This stress of voice on a particular part of a word, is equally necessary to the ease of utterance and the melody of speaking.

In addition to the accent, which may be called primary, there is, in pronouncing words of many syllables, a secondary accent, less distinct than the principal accent, but evidently distinguishing some one syllable from those which are unaccented. Thus, in the word *indiscriminate*, the principal accent is on the third syllable; but the first syllable is evidently uttered with more force of voice, than the second and last two syllables. The final cause of both accents is the *ease of pronunciation*, and by this should both be regulated; for that manner of pronouncing words which is most easy for the speaker, enables him to utter the several syllables with the most distinctness, which is consistent with a rapid communication of thoughts; and this is necessary to render his enunciation *agreeable* to his hearers. Hence no rules of pronunciation, drawn from the termination of words, from their etymologies, or from the practice of popular speakers, should be suffered to interfere with this fundamental principle, *the ease of utterance*—for a forced, unnatural accent is not only painful to the speaker, but utterly destructive of melody.

The accent may fall on a vowel or on a consonant. When it falls on a vowel, the vowel is long—as in glōry, tāble, lāwful. When it falls on a consonant, the consonant closes the syllable, and the preceding vowel is short; as in hab′it, grat′itude, deliv′erance.*

The *quantity* of a syllable is the time in which it is pronounced. In English this time is *long* or *short*—long, as in frāme, denōte, compensātion—short, as in thăt, nŏt, mĕlon.

The accent has no small influence in determining the length of a syllable, by prolonging the sound of the vowel; but in many words, vowels have their long sound, though not under the accent, as nosegāy, agitāte.

There are some general rules for accenting syllables, which may be discovered by attending to the analogy of formation. Thus words ending in *tion* and *sion* have the accent on the last syllable save one; as *protection*, *adhesion*; words ending in *ty* usually have the accent on the last syllable except two, as, *vanity*, *hostility*.

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* It has been the practice of many English authors, to place the marks of accent, in all cases, over the vowel of the accented syllable—a practice probably borrowed from the Greek language. Thus, in Johnson's Dictionary, and in Richardson's, the vowel *a* in *hăbit* as well as *o* in *hóly*, has the mark of accent, for which reason the mark is no guide to the true sound of the letter, and the learner would be led to give to *a* its long sound thus, hā-bit, as well as to *o* its long sound in hōly.

But this is not the worst evil. The usual rules for dividing syllables, are not only *arbitrary*, but false and absurd. They contradict the very definition of a syllable given by the authors themselves. Thus Lowth defines a syllable to be "a sound either simple or compound, *pronounced by a single impulse of the voice*, and constituting a word or part of a word." But in dividing syllables, no regard is had to the definition—for *manifest*—Lowth divides thus, mă-ni-fest. Here, the first syllable, *man*, is pronounced with a *single impulse of the voice*—according to the definition: yet in writing, the syllable is split—the *constituent part* of a word is divided into *two parts*—that which is to be pronounced with a *single impulse of the voice*, is so separated, as to require *two impulses*. A syllable in pronunciation is an *indivisible* thing; and strange as it may appear, what is *indivisible* in utterance, is *divided* in writing; when the very purpose of dividing words into syllables in writing, is to lead the learner to a just pronunciation.

Few of these rules, however, are so general, that the exceptions to them are not almost as numerous as the words which fall within the rule; and therefore the accent of words is best learned from a dictionary and general usage. The rules laid down for this purpose in several works of distinction, are so numerous, and subject to so many exceptions, that they tend rather to embarrass, than to assist the student.

Most prosodians who have treated particularly of this subject, have been guilty of a fundamental error, in considering the movement of English verse as depending on long and short syllables, formed by long and short vowels. This hypothesis has led them into capital mistakes. The truth is, many of those syllables which are considered as *long* in verse, are formed by the shortest vowels in the language; as *strength*, *health*, *grand*. The doctrine that long vowels are necessary to form long syllables in poetry, is at length exploded, and the principles which regulate the movement of our verse, are explained; viz. *accent* and *emphasis*. Every emphatical word, and every accented syllable, will form what is called in prose a long syllable. The unaccented syllables, and unemphatical monosyllabic words, are considered as short syllables.

But there are two kinds of emphasis; a natural emphasis, which arises from the importance of the idea conveyed by a word; and an accidental emphasis, which arises from the importance of a word in a particular situation.

The first or natural emphasis belongs to all nouns, verbs, participles, and adjectives, and requires no elevation of the voice; as,

"Not *half* so *swift* the *trem*bling *doves* can *fly*."

The last or accidental emphasis is laid on a word when it has some particular meaning, and when the force of a sentence depends upon it; this therefore requires an elevation of the voice; as,

"Perdition catch my soul—but I *do* love thee."

So far the prosody of the English language seems to be settled; but the rules laid down for the construction of verse, seem to have been imperfect and disputed.

Writers have generally supposed that our heroic verse consists of five feet, all pure Iambics, except the first foot, which they allow may be a Trochee. In consequence of this opinion, they have expunged letters from words which were necessary, and curtailed feet in such a manner as to disfigure the beauty of printing, and in many instances, destroyed the harmony of our best poetry.

The truth is, so far is our heroic verse from being confined to the Iambic measure, that it admits of eight feet, and in some instances of nine. I will not perplex my readers with a number of hard names, but proceed to explain the several feet, and show in what places of the line they are admissible.

An Iambic foot, which is the ground of English numbers, consists of two syllables, the first *short* and the second *long*. This foot is admitted into every place of the line. Example, all Iambics.

"Whĕre slāves ŏnce mōre thĕir nātĭve lānd bĕhōld,
Nŏ fiēnds tŏrmēnt, nŏ chrīstiăns thīrst fŏr gōld."

Pope.

The Trochee is a foot consisting of two syllables, the first *long* and the second *short*. Example.

"*Wārms ĭn* the sun, refreshes in the breeze,
Glōws ĭn the stars, and blossoms in the trees."

Pope.

The Trochee is not admissible into the second place of the line; but in the third and fourth it may have beauty, when it creates a correspondence between the sound and sense.

"Eve, rightly call'd *mōthĕr* of all mankind."

"And staggered by the stroke, *drōps thĕ* large ox."

The Spondee is a foot consisting of two long syllables. This may be used in any place of the line.

1. "*Gōod līfe* be now my task, my doubts are done."

Dryden.

2. "As some *lōne moūn*tain's monstrous growth he stood."

Pope.

But it has a greater beauty when preceded by a Trochee.

"Lōad the *tāll bārk* and launch into the main."

3. "The mountain goats *cāme bōunding* o'er the lawn."

4. "He spoke, and speaking in *prōud trī*umph spread,
The long contended honors of her head." *Pope.*

5. "Singed are his brows, the scorching lids *grŏw blăck*."
Pope.

The Pyrrhic is a foot of two short syllables; it is graceful in the first and fourth places, and is admissible into the second and third.

1. "*Nŏr ĭn* the helpless orphan dread a foe." Pope.
2. ————"On they move,
Indiss*ŏlŭ*bly firm."———*Milton.*
3. "The two extremes appear like man and wife,
Coupled togeth*ĕr fŏr* the sake of strife." *Churchill.*

But this foot is most graceful in the fourth place.

"The dying gales that pant *ŭpŏn* the trees."

"To furthest shores the ambrosial spirit flies,
Sweet to the world and grate*fŭl tŏ* the skies."

The Amphibrach is a foot of three syllables, the first and third short, and the second long. It is used in heroic verse only when we take the liberty to add a short syllable to a line.

"The piece you say is incorrect, *why tăke ĭt*,
I'm all submission, what you'd have *ĭt, măke ĭt*."

This foot is hardly admissible in the solemn or sublime style. Pope has indeed admitted it into his Essay on Man;

"What can ennoble sots or slaves ŏr cŏwărds,
Alas! not all the blood of all thĕ Hŏwărds."

Again:

"To sigh for ribands, if thou art sŏ silly,
Mark how they grace Lord Umbra or Sĭr Billy."

But these lines are of the high burlesque kind, and in this style the Amphibrach closes lines with great beauty.

The Tribrach is a foot of three syllables, all short; and it may be used in the third and fourth places.

"And rolls impet*ŭoŭs tŏ* the plain."

Or thus:

"And thunder down impet*ŭoŭs tŏ* the plain."

The Dactyl, a foot of three syllables, the first long and the two last short, is used principally in the first place in the line.

"*Fūrĭoŭs* he spoke, the angry chief replied."
"*Mūrmŭrĭng*, and with him fled the shades of night."

The Anapest, a foot consisting of three syllables, the two first short and the last long, is admissible into every place of the line.

> "Căn ă bōsŏm sŏ gēntlĕ rĕmāin,
> Unmoved when her Corydon sighs?
> Will a nymph that is fond of the plains,
> These plains and these valleys despise!
> Dear regions of silence and shade,
> Soft scenes of contentment and ease,
> Where I could have pleasantly stay'd,
> If aught in her absence could please."

The trissyllabic feet have suffered most by the general ignorance of critics; most of them have been mutilated by apostrophes, in order to reduce them to the Iambic measure. Thus in the line before repeated,

"*Murmuring*, and with him fled the shades of night."

we find the word in the copy reduced to two syllables, *murm'ring*, and the beauty of the Dactyl is destroyed. Thus in the following:

"On every side with shadowy squadrons deep,"

by apostrophizing *every* and *shadowy*, the line loses its harmony. The same remark applies to the following:

"And hosts infuriate shake the shudd'ring plain."
"But fashion so directs, and moderns raise
On fashion's *mold'ring* base, their transient praise."
Churchill.

Poetic lines which abound with these trissyllabic feet, are the most flowing and melodious of any in the language; and yet the poets themselves, or their printers, murder them with numberless unnecessary contractions.

It requires but little judgment, and an ear indifferently accurate, to distinguish the contractions which are necessary, from those which are needless and injurious to the versification. In the following passage we find examples of both.

"She went from op'ra, park, assembly, play,
To morning walks and pray'rs, three times a day;

To pass her time 'twixt reading and bohea,
To muse and spill her solitary tea;
Or o'er cold coffee trifle with the spoon,
Count the slow clock, and dine exact at noon;
Divert her eyes with pictures in the fire,
Hum half a tune, tell stories to the 'squire;
Up to her godly garret after sev'n,
There starve and pray, for that's the way to heav'n."
Pope's Epistles.

Here *e* in *opera* ought not to be apostrophized, for such a contraction reduces an Amphibrachic foot to an Iambic. The words *prayers, seven,* and *heaven,* need not the apostrophe of *e*; for it makes no difference in the pronunciation. But the contraction of *over* and *betwixt* is necessary; for without it the measure would be imperfect.

PAUSES.

Having explained the several kinds of feet, and shown in what places of a verse they may be used, I proceed to another important article, the pauses. Of these there are two kinds —the *cesural* pause, which divides the line into two equal or unequal parts; and the *final* pause, which closes the verse. These pauses are called *musical*, because their sole end is melody of verse.

The pauses which mark the sense, and for this reason are denominated *sentential*, are the same in verse as in prose. They are marked by the usual stops, a comma, a semicolon, a colon, or a period, as the sense requires, and need no particular explanation.

The cesural pause is not essential to verse, for the shorter kinds of measure are without it; but it improves both the melody and the harmony.

Melody in music is derived from a succession of sounds: harmony from different sounds in concord. A single voice can produce melody; a union of voices is necessary to form harmony. In this sense harmony can not be applied to verse, because poetry is recited by a single voice. But harmony may be used in a figurative sense, to express the effect produced by observing the proportion which the members of verse bear to each other.

The cesural pause may be placed in any part of the verse; but has the finest effect upon the melody, when placed after the second or third foot, or in the middle of the third.

After the second:

"In what retreat, inglorious and unknown,
Did genius sleep, when dullness seiz'd the throne?"

After the third:

"O say what stranger cause, yet unexplored,
Could make a gentle belle reject a lord?"

In the middle of the third:

"Great are his perils, in this stormy time,
Who rashly ventures on a sea of rhyme."

In these examples we find a great degree of melody, but not in all the same degree. In comparing the divisions of verse, we experience the most pleasure in viewing those which are equal; hence those verses which have the pause in the middle of the third foot, which is the middle of the verse, are the most melodious. Such is the third example above.

In lines where the pause is placed after the second foot, we perceive a smaller degree of melody, for the divisions are not equal; one containing four syllables, the other six, as in the first example.

But the melody in this example, is much superior to that of the verses which have the cesural pause after the third foot; for this obvious reason: when the pause bounds the second foot, the latter part of the verse is the greatest, and leaves the most forcible impression upon the mind; but when the pause is at the end of the third foot, the order is reversed. We are fond of proceeding from small to great, and a climax in sound pleases the ear, in the same manner as a climax in sense delights the mind. Such is the first example.

It must be observed further, that when the cesural pause falls after the second and third feet, both the final and cesural pauses are on accented syllables; whereas, when the cesural pause falls in the middle of the third foot, this is on a weak syllable, and the final pause on an accented syllable. This variety in the latter, is another cause of the superior pleasure we derive from verses divided into equal portions.

The pause may fall in the middle of the fourth foot: as,

"Let favor speak for others, worth for me;"

but the melody, in this case, is almost lost. At the close of the first foot, the pause has a more agreeable effect.

"That's vile, should we a parent's fault adore,
And err, because our fathers err'd before?"

In the middle of the second foot, the pause may be used, but it produces little melody.

"And who but wishes to invert the laws
Of order, sins against the eternal cause."

Harmony is produced by a proportion between the members of the same verse, or between the members of different verses. Example:

"Thy forests, Windsor, and thy green retreats,
At once the monarch's and the muses' seats,
Invite my lays. Be present, sylvan maids,
Unlock your springs, and open all your shades."

Here we observe, the pause in the first couplet is in the middle of the third foot; both verses are in this respect similar. In the last couplet, the pause falls after the second foot. In each couplet, separately considered, there is a uniformity; but when one is compared with the other, there is a diversity. This variety produces a pleasing effect. The variety is further increased, when the first lines of several succeeding couplets are uniform as to themselves, and different from the last lines, which are also uniform as to themselves. Churchill, speaking of reason, lord chief justice in the court of man, has the following lines:

"Equally form'd to rule, in age or youth,
The friend of virtue, and the guide of truth:
To *her* I bow, whose sacred power I feel,
To *her* decision make my last appeal;
Condemn'd by *her*, applauding words in vain
Should tempt me to take up my pen again;
By *her* absolv'd, the course I'll still pursue;
'If *Reason's* for me, *God* is for me too.'"

The first line of three of these couplets, has the pause after the second foot; in this consists their similarity. The last line in three of them, has the pause in the middle of the third foot; they are uniform as to themselves, but different from the foregoing lines. This passage, which on the whole is very beautiful, suffers much by the sixth line, which is not verse, but rather hobbling prose.*

The foregoing remarks are sufficient to illustrate the use and advantages of the cesural pause.

The final pause marks the close of a line or verse, whether there is a pause in the sense or not. Sentential pauses should be marked by a variation of tone; but the final pause, when the close of one line is intimately connected with the beginning of the next, should be merely a suspension of the voice, without elevation or depression. Thus:

> "Of man's first disobedience, and the fruit
> Of that forbidden tree, whose mortal taste
> Brought death into the world, and all our woe," &c.

When these lines are read without a pause after the words *fruit* and *taste*, they degenerate into prose. Indeed, in many instances, particularly in blank verse, the final pause is the only circumstance which distinguishes verse from prose.

EXPRESSION.

One article more in the construction of verse deserves our observation, which is *Expression*. Expression consists in such a choice and distribution of poetic feet as are best adapted to the subject, and best calculated to impress sentiments on the mind. Those poetic feet, which end in an accented syllable, are the most forcible. Hence the Iambic measure is best adapted to solemn and sublime subjects. This is the measure of the Epic, of poems on grave moral subjects, of elegies, &c. The Spondee, a foot of two long syllables, when admitted into the Iambic measure, adds much to the solemnity of the movement.

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* Churchill has improved English versification, but is sometimes too incorrect. It is the remark of some writer, "That the greatest geniuses are seldom correct," and the remark is not without foundation. Homer, Shakspeare, and Milton, were among the greatest geniuses that ever lived, and they were certainly guilty of the greatest faults. Virgil and Pope were much inferior in point of genius, but excelled in accuracy. Churchill had genius, but his contempt of rules made him sometimes indulge a too great latitude of expression.

> "While the clear sun, rejoicing still to rise,
> In pomp *rolls round* immeasurable skies." *Dwight.*

The Dactyl, *rolls round*, expresses beautifully the majesty of the sun in his course.

It is a general rule, that the more important syllables there are in a passage, whether of prose or verse, the more heavy is the style. For example:

> "A past, vamp'd, future, old, reviv'd new piece."

> "Men bearded, bald, cowl'd, uncowl'd, shod, unshod."

Such lines are destitute of melody, and are admissible only when they suit the sound to the sense. In the high burlesque style, of which kind is Pope's Dunciad, they give the sentiment an ironical air of importance, and from this circumstance derive a beauty. On the other hand, a large proportion of unaccented syllables or particles, deprives language of energy; and it is this circumstance principally which in prose constitutes the difference between the grave historical, and the familiar style. The greatest number of long syllables ever admitted into a heroic verse is seven, as in the foregoing; the smallest number is three.

> "Or to a sād varĭety of wōe."

The Trochaic measure, in which every foot closes with a weak syllable, is well calculated for lively subjects.

> "Softly sweet in Lydian measures,
> Soon he sooth'd his soul to pleasures;
> War, he sung, is toil and trouble,
> Honor but an empty bubble," &c.

The Anapestic measure, in which there are two short syllables to one long, is best adapted to express the impetuosity of passion or action. Shenstone has used it to great advantage in his inimitable pastoral ballad. It describes beautifully the strong and lively emotions which agitate the lover, and his anxiety to please, which continually hurries him from one object and one exertion to another.

"I have found out a gift for my fair,
I have found where the wood pigeons breed;
Yet let me that plunder forbear,
She will say 'twas a barbarous deed.
For he ne'er could prove true, she averr'd,
Who could rob a poor bird of her young:
And I lov'd her the more when I heard
Such tenderness fall from her tongue."

The Amphibrachic measure, in which there is a long syllable between two short ones, is best adapted to lively comic subjects; as in Addison's Rosamond.

"Since conjugal passion
Has come into fashion,
And marriage so blest on the throne is,
Like Venus I'll shine,
Be fond and be fine,
And Sir Trusty shall be my Adonis."

Such a measure gives to sentiment a ludicrous air, and consequently is ill adapted to serious subjects.

Great art may be used by a poet in choosing words and feet adapted to his subject. Take the following specimens:

"Now here, now there, the warriors fall; amain
Groans murmur, armor sounds, and shouts convulse the plain."

The feet in the last line are happily chosen. The slow Spondee, in the beginning of the verse, fixes the mind upon the dismal scene of woe; the solemnity is heightened by the pauses in the middle of the second and at the end of the third foot: but when the poet comes to shake the plains, he closes the line with three forcible Iambics.

Of a similar beauty take the following example.

"She all night long, her amorous descant sung."

The poet here designs to describe the length of the night, and the music of the nightingale's song. The first he does by two slow spondees, and the last by four very rapid syllables.

The following lines from Gray's Elegy, written in a country churchyard, are distinguished by a happy choice of words.

"For who, to dumb forgetfulness a prey,
This pleasing, anxious being e'er resigned?

Left the warm precincts of the cheerful day,
Nor cast one *longing*, *lingering* look behind ?"

The words *longing* and *lingering* express most forcibly the reluctance with which mankind quit this state of existence.

Pope has many beauties of this kind.

" And grace and reason, sense and virtue split,
With all the rash dexterity of wit."

The mute articulations with which these lines end, express the idea of *rending asunder*, with great energy and effect. The words *rash* and *dexterity* are also judiciously chosen.

In describing the delicate sensations of the most refined love, he is remarkable for his choice of smooth flowing words. There are some passages in his Eloisa and Abelard, which are extended to a considerable length, without a single mute consonant or harsh word.

OF READING VERSE.

With respect to the art of reading verse, we can lay down but a few simple rules ; but these may perhaps be useful.

1. Words should be pronounced as in prose and in conversation ; for reading is but rehearsing another's conversation.

2. The emphasis should be observed as in prose. The voice should bound from accent to accent, and no stress should be laid on little unimportant words, nor on weak syllables.

3. The sentential pauses should be observed as in prose ; these are not affected by the kind of writing, being regulated entirely by the sense. But as the cæsural and final pauses are designed to increase the melody of verse, the strictest attention must be paid to them in reading. They mark a suspension of voice without rising or falling.

To read prose well it is necessary to understand what is read ; and to read poetry well, it is further necessary to understand the structure of verse. For want of this knowledge, most people read all verse like the Iambic measure. The following are pure Iambics.

" Above how high progressive life may go !
Around how wide, how deep extend below !"

It is so easy to lay an accent on every second syllable, that any school boy can read this measure with tolerable propriety. But the misfortune is, that when a habit of reading this kind of meter is once formed, persons do not vary their manner to suit other measures. Thus, in reciting the following line,

"Load *the* tall *bark*, and *launch* in*to* the main,"

many people would lay the accent on every second syllable; and thus read, our poetry becomes the most monotonous and ridiculous of all poetry in the world.

Let the following line be repeated without its pauses, and it loses its principal beauty.

"Bold, as a hero, as a virgin mild."

So in the following.

"Reason, the card, but passion is the gale."
"From storms, a shelter, and from heat a shade."

The harmony is, in all these instances, improved much by the semi-pauses, and at the same time the sense is more clearly understood.*

Considering the difficulty of reading verse, it is not surprising to find but few who are proficients in this art. A knowledge of the structure of verse, of the several kinds of feet, of the nature and use of the final, the cesural, and the semi-cesural pauses, is essential to a graceful manner of reading poetry; and even this, without the best examples, will hardly effect the purpose. It is for this reason that children should not be permitted to read poetry, of the more difficult kind, without the best examples for them to imitate. They frequently contract, in early life, either a monotony, or a sing song cant, which, when grown into a habit, is seldom ever eradicated.

CHAPTER XX.

EXPLANATION OF PREFIXES, AFFIXES OR SUFFIXES, AND TERMINATIONS.

A PREFIX is a letter or syllable set at the beginning of a word. An *affix* or *suffix* is a letter or syllable added at the end of a word.

The prefixes and affixes have each a definite signification and particular use in composition with words; but are not used except in composition; and, in some instances, they have lost their particular significancy.

[L. *stands for* Latin, *and* S. *for* Saxon.]

A, in some words, denotes *on*, as in *afoot*, *ashore*; in others, *in*, as *abed*; in others, *off*, as *alight*,—or *from*, as *away*; in others, *at* or *toward*, as *aback*; in others, *at* or *on*, as *afar*, *aloft*. In some words it is a corruption of the Saxon *ge*, and has no specific meaning, but it may give force to a word, as in *abide*, *abet*, *awake*, *aware*. In some cases it is used to form an adverb or modifier; as in *afresh*, *agape*, *ago*, *anew*, *awhile*. In many derivatives from the Greek, it is a *privative*; that is, it deprives a word of its *positive* meaning, and gives it a *negative* signification: as in *apathy*, want of feeling.

Ab, *abs*, L. signifies *from*, denoting *separation*, *departure*, *rejection*, or *aversion*; as in *abscond*, *abstract*, *abstain*, *abhor*, *abjure*.

Ad, L. denotes *to*, *toward*, or *union*, *closeness*; as in *address*, *advance*, *adjoin*, *adhere*. Prefixed to words beginning with *c*, *f*, *g*, *l*, *n*, *p*, *s*, *r*, and *t*, the letter *d* is changed into these letters. Thus for *adcede*, we write *accede*; and thus we write *affix*, *aggregate*, *allude*, *announce*, *appeal*, *assent*, *arrive*, *attract*.

Am, L. *am* or *amb*, S. *emb*, Greek, *amphi*, signifies *about*, *around*, as in *ambient*, surrounding; *ambit*, *ambulant*.

Ante, L. *before*, as in *antecede*, to go before; *antedate*, to date before the true time; *anticipate*, to take before. In *ancestor*, *an* is a contraction of *ante*, antecessor.

Be, S. contracted from *big*, denotes nearness, closeness, as in *beset*, *besiege;* or it may give more force to a verb, as in *bedew*, *bedaub*, *bedeck*. In most words it seems to have little or no effect on the meaning. To *dim*, is to make dim, the same sense as that of *bedim*. It sometimes serves to form a verb from a noun, as in *befriend*, *betroth*, *benight*. Sometimes it varies the sense of a verb, as in *become*, *behave*, *bestow*. In some cases *be*, united with words, forms a preposition, as in *before*, *behind*, *below*, *beyond*. These are called prepositions, because they are followed by words in the objective case; as *before me*, *behind me*, *below him*, *beyond them*. *Be*, in modern English, is changed into *by*, the preposition. But in *because*, the Saxon spelling is retained. *Because* is *by cause*, which is not a preposition nor a conjunction, for it is followed by the preposition *of: because* of the cold, *because* of the rain. *Because*, then, is a compound word, and *cause* is a noun.

Bi, for *bis*, denotes *two*, as in *bifold*, two-fold; *biform*, *bicorn*, *bifid*.

By, S. *be*, denotes nearness; as *by* the house, *by* a tree; a *bystander*, one who stands near. It denotes *close*, *narrow*, or *aside*, in the word *by-way*. In the word *by-law*, *by-word*, *by* is from the Swedish and Danish *bye*, a town or village. *By-law* is a town law; *by-word* is a town or common word. As a preposition, *by* is nearly equivalent to *through*, denoting *means*, or *instrument;* as *by* peace, *by* prosperity a nation is blessed. In the phrase good *by*, or *bye*, *bye* denotes *passing*, or *departure*, the original sense of the verb from which it is derived. *Good bye*, signifies a wish of good departure or going, like *farewell*, go well, may your going be prosperous.

Circum, L. about, around; as in *circumference*, the line that goes round, or bounds a circular body; *circumnavigate*, to sail round. Hence, *circle*, *circulate*.

Co, *con*, *com*, L. *with*, *together*, denoting *union*, *nearness*, or a *joining:* as in *company*, *concert*, *cohere*, *cotemporary*, *copartner*, *commingle*, *conjoin*, *confederate*. Before *l*, the letter *n* is changed to *l*, as in *collect*. Before *r*, it is changed to *r*, as in *correct*.

Counter, *contra*, L. *against*, *in opposition*; as in *counteract*, *to* act in opposition; *contradict*, to deny what has been said; to gainsay.

De, L. denotes *from*, *departure*, *separation*, *downward*; as in *debark*, to go from a ship; *decamp*, *decompose*, *decease*, *debase*, *descend*, *degrade*. But *de* is sometimes used without these precise meanings, as in *demean*, *denote*, *deplore*.

Di, for *dis*, L. denotes *from*, *separation*; hence *extension*, *expansion*, as in *dilate*, to enlarge; *diminish*, to take from, to lessen; *divert*, to turn from; *divide*, *divest*, *divorce*, *diverge*.

Dis, L. denotes *from*, as in *dismount*; or *separation*, *scattering*, as in *dissipate*. Hence its more general use is to give a negative sense to words; as to *disbelieve*, not to believe; *disable*, *disloyal*, *dishonor*. But in some words it has not these precise senses. Before *f* the letter *s* is changed into *f*, as in *differ*, *diffident*.

Du, for *duo*, L. two; as in duplicity, duplicate, from *plica*, or *plexus*, a fold.

E, *Ex*, L. *from*, *out of*, as in *educe*, to draw out; *elect*, to choose out; *except*, *emit*, *emerge*, *exhale*, *excretion*—*Ex* denotes spreading out, in *expand*; *passing from*, as in *exchange*; *going beyond*, in *exceed*; rising from, in *exalt*. In foreign languages, *ex* has been changed into *s*, as in *estrange*, *estray*, from the French. It is sometimes changed to *ec*, as in *eccentric*.

En, French for Latin, *in*, denotes *in*, *on*, *upon*, as in *encumber*, to place a load or weight upon; *enroll*, to place in a roll or register; *endow*, *entail*, *entangle*. In many words it is changed into *m*, as in *employ*, *embellish*, *embolden*, *embark*.

Extra, L. *without*, *beyond*, as in *extraordinary*, beyond the usual order or common course. *Extravagant*, *extravasated*.

Fore, S. denotes *in front*, as in *fore-door*; in *advance*, in place, as in *foremost*, *forerun*; in time preceding, as to *foretell*, to predict. It signifies, also, at the head, in the first rank or place, as the *foreman* of a jury. In *forego*, it has a negative sense, like *for*, that is, to *forbear* to have or enjoy.

For, S. contracted from *fore*, denotes properly *toward*; as to sail *for* France; to the benefit of; as a present *for* the governor; in a bad sense, as penalty *for* a crime; *because*, on *account of*; as a reward *for* services; he groaned *for* pain; *in the place of*, in *exchange*; as to give silver *for* notes. In these senses and others, *for* is a preposition. In compound words, as a prefix, *for* is mostly used to give a word a negative sense; as to *forget*, to lose what was in memory; to *forbid*, to bid not to do; *forsake*, *forgive*.

Id, L. denotes like, (Gr. eidos,) as florid, like a flower; lucid, like light.

In, L. denotes *within*, *into*, *among*; as to *inclose*, *incase*, to shut in; to *inhale*, to draw in; also, *on*, *upon*, as to *indorse*, to write on the back of a paper; to *inflict*, to lay upon; *incumbent*. Also *to*, as to *incline*, *inscribe*. Most generally, *in* prefixed gives a word a negative sense, like *un* and *not*, as *inability*, want of ability; *incapable*, *incautious*, *incommode*. When the principal word begins with *b*, *m*, or *p*, the letter *n* is changed into *m*, as in *imbower*, *imbibe*, *immoral*, *impair*. Before *l* it is changed into *l*, as in *illegal*; before *r* into *r*, as in *irregular*. In a few words it is changed into *g*, as in *ignorance*, *ignoble*. In words from the French, *in* is often changed into *en*, and *em*.

Inter, L. *among*, as in *intermix*, *interpose*, *interfere*; also, *between*, as in *interline*, *interleave*, and *interchange*; hence to stop, forbid, as to *interdict*. *Inter* is changed to *enter* in *enterprise*, *entertain*.

Intra, *intro*, L. *within*, *among*, as *introduce*.

Mal, L. denotes *evil*, *bad*, as in *malcontent*, *maladministration*, *maltreat*.

Mis, S. denotes *mistake*, *error*, *wrong*; as in *misapply*, to apply to a wrong purpose; *mistake*, to take in a wrong sense or manner.

Most is added to express the furthest extent, as in *utmost*, *uppermost*.

Non, L. *not*, is prefixed to words to give them a negative meaning; as in *non-attendance*, *non-residence*, *nonsense*.

Ob, L. denotes *before*, *in front*, *against*, *toward*; as in *object*, that which is before us; opposite, that to which the eye or mind is directed; *obtrude*, to thrust forward; *obvious*, as if before the eyes; *obstruct*, to oppose or stop—to object. But in many words *ob* loses these meanings, as in *obtain*, *oblong*, *oblique*, *oblige*. *B* before *c* is changed to *c*, as in *occur*; before *f* into *f*, as in *offend*, *offense*, *office*; into *p* before *p*, as in *oppose*; before *t* into *s*, as in *ostensible*.

Out, denotes *abroad*, *beyond*, *excess*; as in *out-break*, *out-cast*, *out-most*, *out-brave*, *out-flank*, *out-walk*, *out-sail*, *out-live*.

Over, denotes *above*, in place or office; as in *over-arch*, *overlook*, *over-see*; also *beyond*, as in *over-leap*; also *too much*, or *excess*, as in *over-burden*, *over-charge*; also *turning*, as in *overset*.

Per, L. denotes *through*, *over the whole*, or *by*; as in *perforate*, to bore *through*; *perambulate*, to walk *through* or over the whole; *peradventure*, by chance. But in many words, the exact meaning of this word does not appear, or is not obvious. In *pervert*, it signifies *aside*, to turn aside. This word is used by itself in the sense of *by*, as in *per cent.*, *by* the hundred; *per annum*, by the year; *per se*, *by* himself, *by* itself, &c. In *peroxyd*, *per* denotes the utmost degree of *oxydation*. The letter *r* of this word is changed to *l* in *pellucid*.

Pre, L. *prae*, *before*, in time, as to *precede*, to go before; *in rank*, as in *pre-eminence*, first degree of eminence; *president*, &c.; *forward*, as in *precipitate*, hasty; *before-mentioned*, as in *premises*. But in many words these significations do not appear.

Post, L. *after*, as in *postscript*, what is written after; *postdate*, to date after the true time.

Preter, L. *beyond*, *past*, as in *pretermit*, to pass by, or omit; *preternatural*, beyond what is natural.

Pro, L. *before*, *forth*, *forward*, as in *proceed*, to go forward; *provide*, to seek beforehand; *prominent*, standing out or forth; *protrude*, *promote*, *produce*. In some words it has lost its precise meaning. In *proconsul*, it signifies *for*, *instead of*; so in *pronoun*, a word in the place of a noun.

Re, L. denotes *return*, or *backward*: hence *again*, *repetition*, as in *re-act*, to return action; *re-adorn*, *re-call*. But in many words, it has lost its precise meaning, as in *receive*, *remove*, *repose*, *resolve*, *recommend*.

Retro, L. *backward*, as in *retrospect*, a looking back; *retrograde*, a moving backward.

Se, L. denotes *separation*, as in *seclude*, *secede*.

Sub, L. *under*, in place or quantity, or in rank: in place, as in *subjacent*, lying under; *subterranean*, under the surface of the earth; in quantity or degree, as in *sub-acid*, moderately acid; in power or rank, as in *subaltern*, *subordinate*: also in the place of, as in *substitute*. In *subdivide* it signifies to divide again or into smaller parts. The letter *b* of this word is changed into *f* in *suffer*; into *m* in *summon*; into *p* in *suppose*; into *s* in *suspend*, *suspect*, and others; and into *g* in *suggest*.

Subter, L. *under*, and hence evasion; this appears in *subterfuge*.

Super, L. *above*, *over*, excess; as in *superabound*. This prefix has, in the French language, been contracted into *sur*, as in *surpass*, *surprise*, *survey*, *survive*.

Supra, L. *above*, as in *supramundane*, above the world.

Trans, L. *from side to side*, *over*, *beyond*, *across*; *from one to another*, as in *transgress*, to go beyond law; *transplant*, to plant in another place; *transcend*, to ascend beyond others; *transmute*, to change from one thing to another; *transfer*, as to convey from one to another. It is abbreviated (or from another language) in *traject*, *trespass*.

Un, is equivalent to *not*, and much used like *in*, to give words a negative sense; as in *unacceptable*, not acceptable. It also denotes to *undo* what has been done, as in *unbina*, *unbar*.

Ultra, L. *further*, *beyond*, and to *the extreme point*; as in *ultramontane*, beyond the mountains; *ultraism*, a pushing to extremes. It is abbreviated into *ulterior*, *ultimate*.

Up, denotes *rising*, as in *uplift*; sustaining, as in *uphold*; and turning over, as in *upset*.

With, in strictness, denotes *joining*; hence in meeting objects, it denotes moving or standing against them, hence opposition; as in *withstand*; as we say, *stand to him*. It signifies, also, *retaining*, as in *withhold*, and *back*, *backward*, as in *withdraw*.

OTHER WORDS IN ENGLISH COMPOUNDS.

Demi, L. signifies *half*, as in *demitone*, a half-tone.

Duo, L. *two*, as in *duodecimo*, two and ten, that is, twelve; twelve leaves to a sheet.

Hemi, and *semi*, from the Greek, signify *half*, as in *hemisphere*, half a sphere; *semi-annual*, half yearly.

Mult, *multi*, L. *multus*, expresses many, as in *multiform*, having many forms. So in *multiply*, to make many.

Prime, *primo*, L. first, as in *primeval*, *primogeniture*.

Quad, L. denotes *four*, as in *quadruple*, fourfold.

Quart, L. signifies *four* or *fourth*, as *quarto*, a book with sheets making four leaves; *quartan*, an ague, returning every fourth day.

Quinque, L. *five*, as in *quinquevalve*, having five valves.

Six, L. *sex*, as in *sixteen*, six and ten.

Sept, L. *seven*, as in *septennial*, once in seven years.

Oct, L. *eight*, as in *octavo*, a book with eight leaves to a sheet.

Nona, L. *nine*, as in *nonagesimal*, nineteenth.

Dec, *decem*, L. *ten*, as in *decimal*, tenth.

Uni, L. *one*, as in *unison*, one sound; *uniform*, of one form.

PREFIXES FROM THE GREEK LANGUAGE, AND OTHER INITIAL WORDS IN COMPOUNDS.

A, sometimes denotes *destitution*, and gives a negative sense, as in *anonymous*, without a name; *apathy*, without feeling, *atheism*, disbelief of a God.

An, has sometimes the sense of want or destitution, as in *anarchy*, want of government, confusion.

Amphi, *about*, *around*, as in *amphitheater*. Hence, in English, it is used to express *two* or *both*, as in *amphibious*, living in two elements, air and water. It is contracted in *ambiguous*, which signifies doubtful, equivocal; *ambidextrous* signifies using both hands with equal ease.

Ana, signifies *again*, *anew*, as in *anabaptism*.

Arch, signifies *chief*, as in *arch-duke*, *arch-bishop*. Before a vowel *ch* have the sound of *k*, as in *architect*; before a consonant, these letters have the English sound, as in *archbishop*.

Anti, *against*, noting opposition, as in *anti-christ*, one who opposes Christ or the christian religion; *antidote*, *anticlimax*, *antipode*. But in *antiquary* it has the sense of *ante*, before.

Apo, signifies *from*, *off*, as in *apostate*, one who forsakes his faith or sect; *apostle*, one sent, a messenger.

Dia, *through*, as in *diameter*, *diaphanous*.

Epi, signifies *on*, *upon*, as in *epitaph*, an inscription on a monument; *epidemic*, a disease upon a people, common.

Eu, denotes *well*, *good*, as in *eulogy*, praise; *eudiometer*, *eucharist*.

Hepta, seven, as in *heptachord*, system of seven sounds; *heptarchy*, government of seven kings.

Hetero, other, different, as in *heterodox*, other doctrine than that of the scripture; *heterogeneous*, of a different kind.

Homo, like, similar, as in *homogeneous*, of a like kind.

Hex, six, as in *hexahedron*, a figure of six equal sides; *hexagon, hexagonal, hexaped.*

Hie, sacred, as in *hierarchy*, sacred order.

Hydra, hydro, water, as in *hydropical*, having the dropsy; *hydromel*, water and honey; *hydrography, hydrophoby.*

Hyper, above, as in *hyperbolical*, exaggerated; *hypercritical*, over critical.

Hypo, under, as in *hypocrite*, one who dissembles; *hypothesis*, supposition.

Litho, stone, as in *lithography*, engraving on stone.

Mon, mono, sole, hence *one*, as in *monosyllable*, a word of one syllable; *monarchy*, government by one person; *monochord, monotonous.*

Meta, beyond, over, from one to another, as in *metaphysics*, a science beyond physics; *metaphor*, one word for another, similitude; *metamorphosis*, change from one form to another.

Octa, eight, as in *octagon*, a figure of eight angles and sides; *octahedron*, a figure of eight equal sides; *octave, octavo.*

Ortho, straight, right, as in *orthography*, right spelling; *orthoepy*, right pronunciation.

Oxy, acid, as in *oxyd*, sharp, acute; so in *oxygon*, a figure with acute angles.

Para, beyond, as in *paradox*, beyond opinion, seeming absurdity; *paraphrase*, ample explanation, or comment by the side of another writing; *paragraph*, part of a writing beyond or by the side of another.

Peri, around, as in *periphery*, the line round a circular body; *peripneumony*, an inflammation around or near the lungs; *periphrase*, circuit of words, circumlocution.

Penta, pente, five, as in *pentachord*, an instrument with five strings; *pentagon, pentahedral, pentecost.*

Poly, many, as in *polysyllable, polygon, polyhedron, polytechnics.*

Proto, first, chief, as in *proto-martyr, prototype, prothonotary.*

Pseudo, false, not genuine, as in *pseudo-prophet, pseudology.*

Pyr, fire, as in *pyrotechnics*, the art of making rockets and other fire-works.

Syn, *with*, *together*, as in *synod*, *synonym*, *synagogue*; so in *synchronous*, being at the same time. Before *l*, *n* is changed into *l*, as in *syllable*, *syllogism*; before *m*, into *m*, *symbol*, *symphony*, *symmetry*, *sympathy*.

Tri, three, as in *triennial*, every three years, or once in three years; *triangle*, a figure with three angles.

TERMINATIONS OF NAMES OR NOUNS.

Age, French, denotes *descent* or *relation*, as in *parentage*; *state*, as in *bondage*, *vassalage*; or a whole class or order, as *baronage*, *peerage*; or *toll*, *fee*, *commission*, as in *butlerage*, *brokerage*, *ferriage*, *postage*, *salvage*, *dockage*. But there are exceptions, as *homage*, *nonage*, *heritage*, and others.

Al, denotes *act*, as in *arrival*, *recital*, *renewal*; the act of *arriving*, *reciting*, *renewing*. So in *proposal*, *revival*. Observe, the final *e* of the words is dropped before *al*.

An, or *ian*, denotes person, as in *civilian*, a professor of the civil law; so in *comedian*, *librarian*. In some words, this termination denotes one of a sect or party in religious belief, as in *Arminian*, *Socinian*, *Trinitarian*.

Ar, *er*, *or*, denotes person or agent, as in *liar*, *friar*, *player*, *broker*; *actor*, *instructor*, *visitor*. These terminations are from the Saxon *wer* or Latin *vir*, a man; and usually indicate the masculine gender. But *er* and *or* are used in some words for a person of either sex, as in *teacher*, *visitor*. In like manner, *er* has come to denote things without life, implying agency or instrumentality, as in *folder*, *girder*, *graver*, *hanger*, *lever*. In law and mercantile terms, *er* or *or* denotes the person who performs an act, and *ee* the person to whom an act is done, as *mortgager*, one who gives a mortgage; *mortgagee*, the person to whom a mortgage is given. So *bailer*, *bailor*, and *bailee*; *payer*, *payee*; *assignor*, *assignee*; *indorser*, *indorsee*.

Ard, German, Swedish and Danish, *art*; Dutch, *aart*, denotes kind, sort, genius, temper; hence particular character from habit, as in *drunkard*, one who habitually drinks to excess; *sluggard*, *niggard*, *dotard*. *Bastard* and *hagard* are exceptions.

Ate, from the Latin passive participle, denotes person, as in *legate*, *advocate*, *novitiate*, *associate*.

Cide, from the Latin, denotes a killing, or murderer, as in *parricide*, one who kills his parents; *fratricide*, one who kills his brother.

Dom, S. denotes jurisdiction, limits of authority, and the extent of territory over which it is exercised, as in *dukedom*, the land of a duke; *kingdom*, *popedom*. Added to adjectives, *dom* denotes state, as in *freedom*, *wisdom*, the state of being free or wise.

Ess, added to a name, denotes a female, as in *heir*, *heiress*; *lion*, *lioness*.

Head, *hood*, S. *had*, German, *heit*, denotes state; as in *Godhead*, *boyhood*, *childhood*, *brotherhood*, *widowhood*.

Ism, from the Greek, denotes state, as in *truism*, the state of being true; act or practice, as in *favoritism*, *vandalism*; characteristic act or word, as in *vulgarism*; peculiar idiom or style, as in *atticism*; particular tenets or doctrine, as in *atheism*, *deism*, *catholicism*, *polytheism*, *stoicism*.

Ist, from the Greek, denotes a person of a particular sect, or creed, as in *atheist*, *platonist*, *papist*, *methodist*; or it denotes office, profession, or occupation, as in *jurist*, *journalist*, *exorcist*.

Ite, denotes one of a nation, tribe, or sect, as in *Israelite*, *Ammonite*, *Jacobite*, *Levite*. In mineralogy, it denotes species, as *lignite*, fossil wood. In chimistry, it denotes a salt formed by the union of an acid with another substance, as in *sulphite*, a combination of an acid with sulphur.

Ix, from the Latin, denotes a female, as in *executrix*, *administratrix*.

Ment, from the Latin, denotes state, act, or effect, as in *adjustment*, *debasement*, *acquirement*.

Lock, denotes union, as in *wedlock*; or that which fastens, as in *padlock*.

Mony, from the Latin, denotes state, as in *matrimony*, the married state. But in *testimony* it denotes the act of testifying. Exceptions, *alimony*, *ceremony*, *&c.*

Ness, S. denotes *state* or *qualities*, as *freshness*, state of being fresh; *artlessness*, *happiness*, *directness*.

Ret, is a termination given to words in chimistry, denoting a substance combined with an alkaline, earthy, or metallic base, as *sulphuret*, from sulphur; *carburet*, from carbon.

Ric, rick, S. denotes territory with jurisdiction, or authority, as in *bishopric*, the diocese of a bishop, the extent of his authority.

Ship, S. *state, office, dignity, employment*; as in *worship, lordship, ladyship, apprenticeship, consulship, stewardship.*

Wic, wick, S. denotes the district in which one has authority, as in *bailiwick*, the district in which a bailif has authority.

Ure, ture, denotes *act* or *state*, as in *exposure, procedure, capture, expenditure*. But the exceptions are very numerous, as *ligature, legislature, vesture, measure, treasure*, and many others.

Ty, L. *tas*, French *te*, denotes *state, condition*, as *liberty*, the state of being free.

Tion, sion, L. *tio, sio*, denotes state or act, as *motion*, state of moving; *division*, state of being divided, or act of dividing.

DIMINUTIVES.

Ling, added to a noun, denotes a small one of the kind; as in *duckling, suckling, witling.*

Kin, also denotes a small one of the kind, as in *lambkin.*

Ock, or *oc*, is also diminutive, as in *hilloc*. In *bullock*, it has lost this meaning.

Et, is used also as diminutive, as in *floweret, floret, flasket, billet.*

Note. Some of the prefixes and terminations uniformly give to words a definite signification, such as *ante, anti, super*, and *post, less, ness*. But in many cases this is not the fact, and to obtain a clear knowledge of the meanings of words, the student must resort to a correct dictionary.

TERMINATIONS OF ADJECTIVES.

Adjectives, or attributes, are words which express the qualities of things, or the supposed qualities; those properties which are ascribed to them. They therefore always refer to the names of the things expressed or described, and are not used except in connection with nouns.

Able, *ible*, L. *habilis*, fit, suitable. These terminations are the same, one used chiefly in words of our native language; the other in derivatives from the Latin. They primarily express *power*, *fitness*, which is expressed by the words, *that may or can be*, as in *attainable*, that may or can be attained; *perceptible*, that may or can be perceived. But in many words, adjectives with these endings express positive qualities, not that *may be*, but that actually *are*, as *agreeable*, that is, pleasing; *palatable*, *affable*, *capable*, *reasonable*.

Al, from the Latin, expresses *quality*, as in *general*, *liberal*; or pertaining to, as *humeral*, pertaining to the shoulder; consisting of, as in *material*, consisting of matter; *musical*, *political*.

An, from the French and Latin, is chiefly used to express something belonging to a country, as *European* manners, *Gallican* church, *Grecian* history This termination expresses also what belongs to a sect, as in *Epicurean*; or to a person, as in *Herculean*.

Ant, *ent*, from the Latin participle of the present tense, denotes *quality*, as in *abundant*, the quality of abounding; *excellent*, *eminent*, *protuberant*, *inherent*. The nouns connected with these adjectives end in *ance*, *ence*, as in *abundance*, *eminence*.

Ar, *ary*, from the Latin, denotes *quality*; or *pertaining to*, as in *linear*, pertaining to a line; *salutary*, the quality of being safe, or promoting health. *Adversary*, *epistolary*, *plenary*, *muscular*, *globular*.

Ate, from the Latin passive participle, denotes *quality*, as in *intimate*, the quality of being near in friendship or knowledge. *Deliberate*, *insensate*. Nouns connected with adjectives of this termination, end in *cy*, as in *intimacy*.

En. This termination is added to a few nouns, making adjectives that express their qualities or substance, as *linen*, consisting of flax; *woolen*, *golden*, *brazen*, *wooden*.

Fold, S. denotes *double*, as in *fourfold*, four double; *tenfold*.

Form, L. expresses likeness, sameness, *shape*, as in *uniform*, having the like or same form; *multiform*, having many forms.

Ful, for *full*, denotes *fullness*, *abounding*, *plenty*, as in *bount-*

ful, wonderful. Or it expresses the quality, as in *grateful, thankful.*

Ic, ical, from the Latin, *ic,* Sax., *ig,* like, denotes *containing,* or *pertaining to,* as in *musical,* pertaining to or containing music; *biblical, public.* It is often used merely to express quality, as in *economical, fanatic.*

Ile, from the Latin, denotes *power* or *tendency; that may or can be;* as in *ductile,* that may be drawn; *flexile,* that may be bent. It also expresses mere quality, as in *juvenile,* expressing the qualities of youth; *puerile,* the qualities of boys, that which belongs to boyhood.

Ish, S. *isc,* German *isch,* Danish *isk,* expresses *likeness, or the qualities of,* as in *heathenish,* like the heathen, or having the same qualities. It also expresses a small degree of the quality of the adjective to which it is added, as in *whitish, yellowish.* Added to a noun, it denotes a moderate degree, as in *feverish, saltish;* or quality, as in *slavish, roguish, childish.*

Ive, from the Latin, French, *if, ive,* denotes *adapted to, that serves to,* and hence *giving* or *performing,* as in *distributive,* serving to distribute; *instructive,* serving to instruct, or affording instruction. But it also denotes containing or conveying, as in *abusive,* containing abuse; also an act complete, as in *abortive;* and quality, as in *active, adhesive, attentive;* and it has a passive sense in the phrase, *adoptive* son, a son adopted.

Less, S. *laes,* from *lessan,* to loose, to free; German *los,* denotes *separation, deprivation,* as in *artless,* without art; *helpless, hopeless, fatherless, motherless.*

Like, ly, S. *lic, lice;* German *lich;* Dutch *lyk;* Swedish and Danish *lig.* This is the English *like,* as in *Godlike;* and it is contracted to *ly* in *godly, homely.*

Ory, from the Latin, denotes containing or giving, as in *monitory,* containing or giving advice; so in *hortatory, advisory;* also consisting in, as *inflammatory.*

Ous, L. *osus,* French, *eux, euse,* expresses quality; containing, as in *gracious,* containing or manifesting grace; *glorious, joyous, cautious, decorous, famous, piteous.*

Ow, S. *ew,* contracted from *g,* or ag, eg, ig, denotes likeness or quality, as in *yellow, mellow.*

Some, S. *sum.* This is the English *some,* denoting a portion, degree, or quantity; but usually, in composition, it denotes *full,* as *toilsome,* full of toil; *delightsome* is nearly the same as *delightful*. In *wholesome*, it denotes tending to make whole; that is, to give health.

Ty, in *twenty*, *thirty*, *&c.* is the Saxon *tig*, Welsh *dig*, Greek *deka*, Latin *decem*, ten. *Twenty* is *twenn* or *twain*, two, and *tig*, ten.

Y, S. and German *ig*, Greek *eikos*, like; denotes having or containing, as in *healthy*, having health; *bloody*, *heavy*, *dreary*, *sorry*, *wealthy*.

TERMINATIONS AND PREFIXES OF VERBS.

Ate is an ending, usually in verbs, from the Latin passive participle, ending in *atus*. Thus, from the Latin *advocatus*, we have *advocate*, and *to advocate*; from *deliberatus*, we have *to deliberate*. All verbs signify to *do*, *make*, *act*, or *suffer*, something expressed by the word, except the substantive verb, which signifies merely to *be*, to *exist*, as, I am, thou art, he is; we, ye, they are.

En. The French *en*, from the Latin *in*, is prefixed to adjectives to form verbs; as from *large*, to *enlarge*; *able*, to *enable*; or it is prefixed to nouns for the like purpose; as to *enchain*, *enforce*, *engulf*, *encamp*. This prefix often gives force or intensity to the action expressed by the verb. It is, in many words, changed into *em*, as in *empower*, *embroil*.

Ize. This termination, from the Latin and Greek *izo*, gives to the verb the sense of *make*; as to *legalize*, to make legal. But the definition of the verb does not always admit the word *make*; for to *sympathize* is not to *make*, but to *feel* sympathy. In *apostatize*, it is not to *make* an apostate, but to *be* or *become* an apostate. This termination is often written *ise*, from the French; but I have uniformly written it *ize*. When the original word ends in a vowel, the letter *t* is prefixed to *ize*, as in *dogma*, *dogmatize*; *stigma*, *stigmatize*. But this letter should never be prefixed when the principal word ends with a consonant. Hence *systemize* is the correct orthography of the verb, from *system*. When *y* ends a noun, this letter is changed into *i*, as *geometry*, *geometrize*.

Fy. This termination of verbs is from the Latin *facio*, to make, as in *fortify*, *fortis*, strong, and *facio*, to make. The *y* in this termination has its first or long sound.

En. This is seen as a termination in a few verbs, as in *lighten*, *hearken*, *betoken*, *listen*, *awaken*. *An* is the regular termination of all verbs in the Saxon, as *en* is of all verbs in the German and Dutch. Thus, *heorcnian*, or *hyrcnian*, is the Saxon spelling of *hearken*. The most general mode of forming verbs from nouns is to prefix the word *to*. Thus from *favor*, we have to *favor*; *fashion*, to *fashion*; *farm*, to *farm*; *flock*, to *flock*.

REFLECTIONS ON CLOSING THE AUTHOR'S LITERARY LABORS.

The foundation of private and public happiness is genuine religion, consisting in supreme love and reverence of the Creator and Governor of the universe. Without this religion, a nation may be great in population, great in wealth, and great in military strength; but it will be corrupt in morals, degraded in character, and distracted with factions. This is the order of God's moral government, as firm as his throne, and unchangeable as his purpose.

Sin is the source of all evils, personal, civil, social, and political. Men *know* this truth; they *feel* it; they *acknowledge* it in theory; yet most men continue in the practice of it; they sin *knowingly and willfully;* and unless arrested by Divine interposition, they *live in sin, and die in sin.*

It is impossible for a wicked man, or a wicked nation to be happy. Sin destroys private peace and public tranquility; it is the cause of all political disorders; it has destroyed every free government ever formed; it will destroy every free government which men can devise; it has produced war with all its horrors, from the beginning of the world; it has filled the earth with confusion and calamity; and its end is to doom men to eternal perdition.

There is but *one way* to secure peace of conscience, and the peace of society; but *one way* to secure civil and political rights; but *one way* to secure everlasting felicity; this is God's own way; it is prescribed by his irreversible decree; *it is in entire obedience to his laws.*

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